THE CAMPAIGN FOR NORTH AFRICA
THE DESERT WAR 1940-43
LAND GAME RULES OF PLAY

Read this First:

The rules of this SPI simulation game are organized in a format known as the *Case System.* This system of organization divides the rules into *Major Sections* (each of which deals with an important aspect of play). These Sections are *numbered* sequentially as well as being named. Each of these Major Sections is introduced by a *General Rule,* which briefly describes the subject of the Section. Many times this General Rule is followed by a *Procedure* which describes the basic action the Player will take when using the rules in that Section. Finally, the bulk of each Major Section consists of *Cases.* These are the specific, detailed rules that actually regulate play. Each of these Cases is also numbered. The numbering follows a logical system based upon the number of the Major Section of which the Cases are a part. A Case with the number 6.5, for example, is the fifth *Primary Case* of the sixth Major Section of the rules. Many times these Primary Cases are further subdivided into *Secondary Cases.* A Secondary Case is recognizable by the fact that it has two digits to the right of its decimal point. Each Major Section can have as many as nine Primary Cases and each Primary Case can have as many as nine Secondary Cases. The numbering system is meant as an organizational aid. Using it, Players can always easily tell where a Case is located in the rules. As a further aid, an outline of the Major Sections and Primary Cases is given at the beginning of the rules.

How the Section and Case Numbers Work:

Major Section Number
  Primary Case Number
  Secondary Case Number

[6.53]

The preceding example would be the number of the third Secondary Case of the fifth Primary Case of the sixth Major Section of the Rules.

How to Learn to Play the Game:

Familiarize yourself with all of the components. Read all of the General Rules and Procedures and read the *titles* of the Primary Cases. Set up the game for play (after reading the pertinent Section) and play a trial game against yourself referring to the rules only when you have a question. This procedure may take you a few hours, but it is the fastest and most entertaining way to learn the rules short of having a friend teach them to you. You should not attempt to learn the rules word-for-word. Memorizing all that detail is a task of which few of us are capable. SPI rules are written to be as complete as possible — they're not designed to be memorized. The Case numbering system makes it easy to look up rules when you are in doubt. Absorbing the rules in this manner (as you play) is a much better approach to game mastery than attempting to study them as if cramming for a test.

We hope you enjoy this SPI game. Should you have any difficulty interpreting the rules, please write to SPI, phrasing your questions so that they can be answered by a simple sentence, word, or number. You must enclose a stamped, self-addressed envelope. We cannot guarantee a proper answer should you choose to phone in your question (the right person is not always available — and since SPI has published hundreds of games, no one individual is capable of answering all questions). Write to:

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[1.0] INTRODUCTION

The Campaign for North Africa is a simulation of operations in Libya and Egypt from 1940 through early 1943. *CNA* was designed as a definitive simulation; it was intended for the sophisticated wargamer and the serious student of history. As such, *CNA* is the most logistically-oriented game ever designed and may be considered by some to be overly complex. Actually, the game system itself is quickly absorbed and most experienced Players will have little problem understanding how to play the game. At the same time, there is a ferocious amount of information for the Players to digest and use, and the assimilation and coordination of all this information is what makes *CNA* so formative, so challenging, and so (hopefully) enlightening. Very little has been abstracted; *CNA* contains more hard information on the subject than any other single source encountered by the SPI design staff.

The Campaign for North Africa is not a game for one, two, or even three players. This is a multi-Player game in the true sense of the word. It is recommended, for maximum playability and efficiency, that, on each side, one person be assigned to Logistics, one person to Air Forces command, and at least three Players to Land Forces command (again per side). It is also firmly suggested that there be at least one calculator available.

It should be stated here that although the rules are quite long, *CNA* is quite an easy game to *explain* to somebody. By this, we mean that someone who is familiar with the rules can tell other Players how to play with remarkable ease.

Each hex represents approximately eight kilometers; each Game-Turn represents one week of "real" time. Units range in size from companies (approximately 100 men) to divisions (15,000).

[2.0] HOW TO PLAY THE GAME

COMMENTARY:

CNA is a game unlike any other that SPI has published in the past. This Section serves as an orientation for the prospective Player (or, at least, rules reader), to provide a basic overview of what is involved in the game and how it is organized.

CASES:

[2.1] ORGANIZATION OF THE RULES AND HOW THEY SHOULD BE READ

This Section of the rules (2.0) is divided into three parts. The second part discusses how the game is set-up. The third part explains what is involved in actually playing the game. Things are explained in very general terms; the intention of this Section is to give Players a broad overview of what the game is like and what sort of effort is required to learn and play it.

Section 3.0 is a glossary which is intended to both explain terms utilized in the play of the game and to explain their relationship to each other. The glossary should be perused before the rest of the rules, but some definitions will not be completely clear until the reader has absorbed pertinent Sections of the rules. The glossary is intended to serve both as an introduction and as a constant guide to Players in reference to specific Sections.

Section 4.0 describes the game equipment and details how the game should be set-up.

Section 5.0 includes the "Sequence of Play." This is basically an outline of a single Game-Turn. It should also be read before the rest of the rules, but will be most useful as a guide to the Players in their actual play of the game.

Sections 6.0 to 32.0 include all of the rules necessary to play the Land Game. The Land Game includes abstracted and relatively simple supply rules, and very simple air power rules. Sections 33.0 to 47.0 encompass the Air Game, which involves individual planes and pilots, and all of the effects of their presence. Sections 48.0 to 58.0 constitute the Logistics Game, which substitutes a highly realistic and intensive supply system to replace the abstract utilized if the Land Game alone is played. It is possible to play the Land Game on its own, or to combine the Land and Air Games, or to combine the Logistics Game with either the Land Game or with the Land and Air Games. Sections 59.0 to 65.0 are the five Scenario Groups. One Scenario is the entire 111 Game-Turn campaign from September 1940 (date of the Italian invasion of Egypt) on. Other Scenarios are smaller "slices" of the complete Campaign Game which can be played to a decision in considerably less time than the entire game.

[2.2] HOW THE GAME IS SET UP

There are two basic — and vital — prerequisites for playing *CNA*: time and people.

Preparing to play a game of *CNA* will take a great deal of effort. Indeed, this game cannot be played without considerable preparation, both in preparing the parts of the game for play and also in planning strategies and organizing a workable division of labor and logistics system.

Basically, there are very few counters representing units in play on the map at any one time. However, unlike many other SPI games, the counter on the map does not include all of the information about the unit it represents is necessary to play *CNA*. *Au contraire!!* In order to play *CNA*, the Players are required to keep track, on paper, of a myriad of details concerning the status of their units, including (but not limited to) the current strength of that unit, subsidiary units attached to that unit, the unit's current morale level and its supply status, and numerous concomitant factors. (For example, under the category "supply status," a current record of how many trucks one must keep carrying water, fuel, ammo and stores are attached to a given unit.)

Setting up the game involves compiling the information pertaining to each unit needed in the scenario. Provided with the game are three *TOE Log Sheets;* these forms are designed to store all such necessary information. Each of the three types of TOE Log Sheets is designed for a specific type or size of unit. In order to play *CNA*, it will be necessary for the Players to manufacture additional Log Sheets; they may wish to design their own or simply copy those provided. Most of the information that must be written on the Log Sheets will be found on the Organization/Arrival Chart (4.45) and within the Scenario Rules Section itself. One Log Sheet will be required for each counter on the map.

Aside from getting all the components set up and all the TOE and supply sheets filled out, Players should be aware that they will need a goodly number of pencils (with erasers) and a hefty supply of scratch paper. A large supply of stamina might also come in handy.

In getting ready to play a Scenario, all the Players should have a fairly good working knowledge of the rules before they start. To do that, look through the charts and tables — and especially the TOE and OA Sheets — and familiarize yourself with them. The first few sections of the rules (1.0 through 5.0) are written to familiarize the Player with game terms and the system of play in general. Do not be fazed by the sheer weight of the game; play actually flows quite smoothly once the system is digested. Above all, get everyone organized; it is difficult to overstate the necessity for this. For those just wishing to see how the game works, it is suggested that they use the first Scenario, The Italian Offensive (60.0). Set it up, work out your TOE Log Sheets, and push the counters around to see what is supposed to happen. At the end of an hour or two you should be fairly fluent in the system.

[2.3] HOW TO RUN A GAME OF *CNA*

CNA is a logistically-oriented game, and its play requires not only a lot of attention to logistics, but, if you will, a logistically sound methodology. Two years' worth of playtesting experience has left us with the consensus that the optimum number of players for a game of *CNA* is between eight and ten — four to five per side. Fewer than four and there is too much work for somebody to do efficiently; more than five and it takes too long to reach a consensus whenever a decision requires everyone's input.

How the Players divide the functions and responsibilities is critical. Playtesting proved conclusively that the team that communicated the best all the way up and down the line generally prevailed over a team of individuals technically proficient but poorly coordinated. Basically, here is the division of labor that became the norm in our playtesting:

Commander-in-Chief: In charge of all intelligence gathering and cataloging and dissemination of all information about the Enemy. Includes responsibility for Raids on Rommel and other dirty tricks. Basic responsibility to make *strategic* decisions and settle any intra-team disputes.

Logistics Commander: In charge of all supplies. Responsible for getting required material from Italy/Britain to port in North Africa (easy for the Allied Logistics Commander) and hence to the Supply Dumps. Includes command of all Third Line Trucks, and some of the Second Line Trucks, as well as Naval Convoys (for the Axis Logistics Commander).

Rear Area Commander: In charge of getting supplies and reinforcements to the front, and of rear area (*i.e.,* immediately behind the front line troops) security, and the deployment of reserves. Also responsible for prisoners and any construction. In charge of some Second Line Trucks.

Air Commander: In charge of all planes and pilots, and responsible for planning and execution of all air missions. Also responsible for deployment of air bases.

Front-Line Commander: Responsible for executing all attacks or coordinating defensive efforts. Also in charge of troop movement in the front line.

In order for a team to play well, everyone must take his task seriously and perform it competently. The Logistics Commander *must* plan to have Tank Replacements available when needed; the Rear Area Commander *must* warn the Air Commander of a Fuel shortage in time to avert disaster; the Commander-in-Chief *must* act decisively and forthrightly to resolve disputes among team members and devise and supervise the execution of a workable overall plan; *et cetera.*

[2.4] PLAYING TIME

To play the entire course of *Campaign for North Africa* will take *at least* twelve hundred hours (that's 1200)! Probably more, and that's just playing time. Each Game-Turn takes about 10 hours, perhaps less when there is little movement or combat (we have completed a full Game-Turn in under

two hours, but that was because both sides were logistically exhausted). *This is a long game.* It takes a lot of involvement to play, but we feel that the involvement will be worthwhile because *CNA* allows the players to make *all* the operational and strategic decisions that the original commanders had to make.

[3.0] GLOSSARY AND UNIT DEFINITIONS

CASES:

[3.1] DEFINITIONS OF TERMS

Actual Combat Value: All resolution of combat involves the use of Actual Points. Certain calculations of combat strengths involve first determining Raw Points and then converting these to Actual Points.

Air Facility: An airplane base. There are four types. Airfields (large) and Air Landing Strips (small) are used by planes other than Flying Boats. Flying Boat Basins (large) and Flying Boat Alighting Areas (small) are used only by Flying Boats.

Armored Vehicle: Any fighting vehicle including tanks, tank destroyers, armored cars, and self-propelled artillery, but not half-tracks or motorcycles.

Assault: Ground combat in which the combatants are visible to each other (as opposed to Barrage). A *Probe* is an Assault in which the attacker uses minimal forces. An Assault consists of two parts: *Anti-Armor Combat* (14.0), and then *Close Assault Combat* (15.0).

Assigned: A smaller unit is considered *assigned* to a larger (*parent*) unit if the smaller unit is in an organizational sense part of the parent unit. The number of smaller units which may be assigned to any one parent unit is limited; assignments of units (and their realignment) in *CNA* is more or less inflexible, depending upon the nationality in question. If a smaller unit is *assigned* to a parent unit, it is considered a constituent part of the parent unit, even if the parent unit is in one hex and the assigned unit is in another hex.

Attached: A smaller unit is considered attached to a larger (*parent*) unit if both are in the same hex and the smaller unit is represented on the game map by the parent unit's counter. **Note:** It is possible for a smaller unit to be either *assigned* or *attached* (not *necessarily* both) to a parent unit; it is possible for a smaller unit to be *assigned* to one parent unit and simultaneously *attached* to another.

Battle Group: A Brigade-equivalent headquarters capable of attaching a wide variety of compositions of unit types.

Breakdown: All types of vehicles, with minor exceptions, are subject to the possibility of being rendered unusable due to Breakdown (throwing a track, flat tire, busted axle, etc.). The probability of a vehicle breaking down is a function of its type and of the terrain and distance it is moved through.

Breaking Off: Units that are involved in combat become "locked together." If the combat is relatively light, the units are considered *In Contact;* if the combat is heavy, they are considered *Engaged.* The act of disengaging from the enemy is termed Breaking Off.

Capability Point: A measure of the relative time needed to perform an action. Each unit possesses a *Capability Point Allowance* indicating how much a unit can do in one Operations Stage.

Cohesion Level: How combat effective the unit is at that point in time. The Cohesion Level is affected by acquiring *Reorganization Points* and *Disorganization Points.*

Combat Air Patrol (abbr. CAP): Offensive CAP involves sarching for intruder aircraft. Defensive CAP involves escorting other Friendly aircraft.

Combat Unit: Any unit capable of engaging other units and/or aircraft in combat. Headquarters, Engineers and Dummy Tank Formations are considered combat units in certain situations.

Combined Arms Attack: Tanks engaging in Close Assault must be supported by at least an equal number of infantry or the tank combat values are reduced. The tanks are considered performing a Combined Arms Attack.

Desert Raider: A company-size group of men in jeeps. It is a special "unit" capable of limited types of attacks and is normally permitted to be moved on the game-map unobserved by the opposing Player.

Efficiency Level: A port's ability to embark/disembark troops, equipment, and supplies and to withstand damage.

Engineering Capability: A measure of the capability of a Headquarters to be used to construct/demolish various game items.

Gun: Includes all types of Artillery, Anti-Tank and Anti-Aircraft units.

Headquarters (abbr. HQ): A unit which may be composed of independent subsidiary units (excluding Trucks) either represented by its counter or represented independently by separate counters.

Holding-Off Barrage: A Barrage directed against an Enemy unit which negates the requirement that adjacent Friendly units execute a Close Assault against it.

Initiative: The Player (Axis or Allies) with Initiative decides which Player is the first Player in each of the three Operations Stages of that Game-Turn.

Involuntary Movement: What a unit that incurs a "Retreat" result from a Close Assault has to do (i.e., retreat).

Log Sheet: Piece of paper designed to ease recording of a specific type of information and/or status. Players may alter the Log Sheets to suit their purpose. The *TOE Log Sheets* are sheets of paper used to record the information pertinent to the Players' various combat units.

Maneuver Element: Those forces within a division (or brigade) normally involved in carrying out offensive operations against the enemy; i.e., the main ground combat units (tank and infantry).

Morale: The ability and willingness of the men to fight. All combat units possess a *Basic Morale Rating.* Certain Commonwealth units begin with a lower Morale rating and may be *Trained* up to their Basic rating. Basic Morale may be exceeded by the unit being successful in battle.

Motorized Unit: A unit whose movement is produced by wheeled and/or tracked vehicles. Certain units are always considered motorized and certain units may be motorized if "on foot," or vice versa.

Organization-Size: A measure of the unit's organizational complexity and physical number of men and equipment present. Units are considered Division-, Brigade-, Battalion-, or Company-Equivalents (abbr. -Eq).

Organization at Arrival Chart (Abbr. OA Chart): A chart which lists the date of arrival, original composition and strength of each unit involved in the game at its time of arrival.

Parent Unit: A counter representing a unit comprised of subsidiary units that may be represented by independent counters that could be moved about separately. A Parent Unit may itself belong to a Parent Unit.

Pinned: A possible result of Air Bombardment or Barrage. A Pinned unit may not voluntarily move for the remainder of *that* sub-Phase of the Movement and Combat Phase and may not engage in combat (as opposed to having its combat ratings reduced to zero). In addition, a unit of Player A pinned by Air Bombardment is placed in Reserve 1. Note that a unit pinned by Air Bombardment is affected for the entire first sub-Phase of the first Movement and Combat Phase of the Operations Stage (see Case 41.9).

Reaction: The ability of a unit to evade combat. Directly related to the motorization/mechanization effectiveness of that unit.

Readying Aircraft: The acts of Arming, Fueling and Refitting aircraft in order that they may fly and perform Missions.

Reinforcement: A unit that does not start on the game-map but arrives and is placed in play at some later point in time.

Replacement: An unspecified number of unassigned combat personnel used to recreate destroyed units or increase the effectiveness of existing units.

Sequential Dice Roll: A result in which the dice are read in such a manner as to produce results ranging from 11 through 66. The larger die yields the 10's figure and the smaller die yields the 1's figure.

Shell Unit: A combat unit that possesses a below minimum number of TOE Strength Points (see definition) and/or subsidiary units.

Squadron Ground Support Unit (abbr. SGSU): The headquarters and support unit for airplanes.

Stacking Point: The amount of tactical volume of ground space a unit requires or the amount of Road or Track space filled by a unit being moved along a Road or Track.

Supplies: Four types of consumables: Ammo, Fuel, Stores, and Water

TOE Strength Point: The number of men and/or vehicles and/or guns needed to produce a minimum of fighting effectiveness in *CNA*. Equivalent to approximately 100 men, 5 to 8 armored vehicles, 4 to 8 guns.

Unit: A counter capable of expending Capability Points.

Upgrading: Increasing a combat unit's combat effectiveness.

Zone of Control (abbr. ZOC): The area of effect surrounding certain units, extending to at most the six immediately adjacent hexes. A ZOC requires opposing units to stop upon entering and attack Friendly adjacent units. (*CNA* uses a Rigid, Active ZOC system.)

[3.2] UNIT DIFFERENTIATION

[3.21] Units are differentiated into the following categories: Infantry-Type, Tank-Type, Recce-Type, Artillery-Type, Anti-Tank-Type, Anti-Aircraft-Type, Headquarters, Engineers, Tank Recovery Squadrons, Squadron Ground Support Units, Dummy Tank Formations, and Trucks. The counters comprising each type are indicated in the Counter Manifest (4.22) with the exception of Dummy Tank Formations, which do not possess a counter.

[3.22] For Barrage and aircraft attacks (Strafing and Bombardment) units are grouped into the following classes:

Infantry-class: All Infantry-Type, Engineers, Headquarters possessing a defensive Close Assault Rating but not possessing an Armor Protection Rating, SGSU, and Recce-Type that do not possess an Armor Protection Rating.

Armor-class: All Tank-Type, Dummy Tank Formations, Tank Recovery Squadrons, headquarters possessing an Armor Protection Rating, Recce-Type possessing an Armor Protection Rating, and those Artillery and Anti-tank-Type units possessing an Armor Protection Rating (SPA and Tank Destroyers).

Gun-class: All Artillery-Type, Anti-aircraft-Type and Anti-tank-Type units comprised of any TOE Strength Points not possessing an Armor Protection Rating, including HQs and infantry with Barrage capability.

Truck-class: All Trucks.

Note: Any Artillery or Anti-tank unit that is comprised of weapons (TOE Strength Points) with an Armor Protection Rating and of weapons without one are considered *two* units for target purposes.

[3.23] Combat units consist of all Infantry-Type, Tank-Type Recce-Type, Artillery-Type, Anti-tank-Type, and Anti-aircraft-Type units. For certain determinations, such as Zone of Control, Reconnaissance, Barrage and Bombardment, certain non-combat units may be considered combat units.

[3.3] HEADQUARTERS UNITS

HQ's serve two functions: They act as command coordination for the individual units under them, and they also represent, when on the game-map, all of the units attached to that HQ.

[3.31] HQ units represent all combat units, Trucks (and their Supplies), etc. attached to that counter. If any combat units are attached, the HQ counter itself is considered a combat unit, and fights with the combined strengths of all units in it.

[3.32] An HQ (and for that matter, all Parent Units) have a CPA equal to the CPA of the 'slowest' unit attached to the HQ.

[3.33] The Stacking Points printed on the HQ are those of a full complement of units. Thus a divisional HQ representing an entire division occupies 5 Stacking Points of space. The rules on unit Equivalents (see Case 9.2) discuss what happens if the division operates at less than full strength. If an HQ has no combat units attached it occupies zero Stacking Points and may use its parenthesized Ratings. It is no longer considered to be a combat unit and may not voluntarily attack.

[3.34] Certain HQ units, mostly with the Italian Army, have artillery assigned to regimental HQ's (guns directly under command of the HQ). These HQ's may use their combat strengths, and losses for the guns are taken as regular losses. However, when all gun TOE Strength Points are eliminated, the HQ is not destroyed: it reverts to the status of a non-combat HQ.

[3.35] Armored Division and Armored Brigade HQ units usually have a "platoon" of tanks assigned, as Players will note by the ratings of each such HQ. These tanks may not be used in combat unless the HQ has no combat units attached. Tanks assigned to HQ's may not be transferred to combat units, regardless of the situation. If such an HQ loses its tanks, they should be replaced by the first available Tank Replacement Points. HQ's with tanks attached are not subject to Breakdown.

[3.36] An HQ unit that has *no* combat values, either with or without parentheses, is captured instantly if it is in a hex without any combat units and an Enemy combat unit places the HQ in its Zone of Control. There is no Capability Point expenditure required for such a capture, and the HQ is treated as one Prisoner Point.

[3.4] COMBAT UNITS

CNA has a great variety of combat units — more than 25 different types, not including aircraft. Although the structure of the game is operational, there has been an attempt to inject a "tactical" flavor into the game by differentiating between the functions of the various units. However, players should keep in mind that this is an operational game, and that many purely tactical functions have been abstracted or ignored. Below is a brief resume of the various types of units, noting any exceptions. Some of the completely familiar units have been omitted.

Motorized Infantry: These are infantry units that are usually transported in Trucks. (The British often called their units Lorried infantry.) Motorized Infantry units must actually have Trucks in order to use their Motorized CPA (i.e., that of the Truck). Otherwise they are regular "foot" Infantry. Units that were usually motorized are so indicated on the units' Characteristics Charts.

Mechanized Infantry: Primarily, these units were not only motorized but also usually supplied with some Armored Cars, half-tracks, armored Personnel carriers, etc. Unless there is a terrible and total emergency, Mechanized Infantry should remain motorized at all times.

Motorcycle Infantry/Reconnaissance: These are mostly Italian Bersaglierei mitraglieri (motorcycle) units (plus two German battalions of Kradschutzen). The equipment is the popular two-man cycle, plus a few jeeps, Armored Cars, etc. Weaponry was pretty good, with a high percentage of machineguns; thus their relatively high firepower. Cycles may not enter hexes prohibited to Light Trucks. Moreover, even though motorcycles are vehicles, they do not use Fuel nor do they suffer Breakdown.

Heavy Weapons Units: There are several of these units, such as the German Schwerste-Infanteriegeschutz units. Equipment varied, but often included machineguns, mortars, some light artillery and anti-tank guns, perhaps a light AA battery. It varies from unit to unit.

Garrison Infantry: These are virtually the sole property of the Italians — and they are usually welcome to them. Most Italian Garrison Infantry came from the GaF Settore di Coperture Regiments, comprised of over-age Italians living in Libya. Their training was minimal, their spirits low, their performance poor. However, units labeled as garrison units (with a G on the counter — and this includes all types of garrison units) stack *free* in the city or town which they were originally assigned to garrison. E.g., the 30th GaF infantry units have zero Stacking Poins when in Bardia. There is one Commonwealth unit which is considered a Garrison: The Matruh Garrison. The OA Sheet gives specific instructions on this unit. unit.

Airborne Infantry: These are treated as normal infantry, unless they are capable of being paradropped, which capability is listed on the Arrival Sheet for that unit. See Case 40.4.

Armored Recce and Armored Car units: Recce units usually comprise light armored cars (Bren Carriers, Autoblindas, etc.), while the Armored Car units have some tanks (Stuarts, PzII's, etc.) and heavier cars. The sole difference is the fact that Armored Car units are virtually light Tank Battalions. (The British considered Recce as infantry, but Armored Car as Armored units.) Recce and AC units have remarkable mobility and are best used to probe and freeze (Pin) small enemy formations.

Artillery: The Artillery units in the game comprise a wide variety of weapons, from 65mm Infantry guns up to 21cm German howitzers and British 5.5" howitzers. Some of the minor guns have been ignored or combined into one "piece" with similar ratings. Italian mortar companies have been melded into the regimental HQ's and *ad hoc* artillery units. Ratings for guns and howitzers were based on Range and Penetration effect, as well as rate of fire and type of shell. Unless stated otherwise on the Arrival Sheet, all Artillery has its own intrinsic (built-in) transport, transport which may *never* be stripped (unless you wish to abandon the guns). Artillery units use Fuel (when moving) as well as Water. However, they are not subject to Breakdown. Players will also note that certain Artillery units have more than one type of gun (e.g., the 221st Artillery Regt. of the German 90th Light Division). All guns belong to the same unit and they are treated as one unit.

Self-Propelled Artillery: These are guns mounted on Tank or quasi-tank chassis. They fire like guns and have Vulnerability Ratings, but they also may be destroyed by Anti-Tank Fire. Their advantage is in increased mobility and Assault value. SP Artillery consumes Fuel and Water and suffers Breakdown.

Coastal Defense Guns: These artillery units always have a CPA of 10 for combat purposes only, unless they have printed CPAs of greater than ten. They may not be moved unless Trucks are attached and assigned to that purpose. Guns with a '0' (*not* '0+') CPA are emplaced and may never be moved. Emplaced Guns do not possess a Vulnerability Rating and may be destroyed only by Barrage, Capture or Air Bombardment. Cost Defense Artillery that is motorized is subject to Breakdown.

Anti-Tank Units: These have "guns" with the ability to pierce armor, thus destroying tanks and other armored units. There are certain TOE Strength Points, not specifically anti-tank, that also have this ability: British 25-pdrs., the famous German 88mm Flak units, Italian 75mm and 90mm AA/Flak units, etc. British Heavy Anti-aircraft units, with 3.7" guns, theoretically had the capability to fire as anti-tank weapons. However, British doctrine was such that they were never (well, hardly ever) used in this role. ("If they were meant to be used as anti-tank guns they would have been called anti-tank guns." Apocryphal, but true.) Unless self-propelled, anti-tank units are *not* armored.

Anti-Aircraft/Flak Units: Of all the units in the game, AA/Flak unis suffered the most liberties in terms of design. The myriad and voluminous AA/Flak batteries spread over Africa were often combined into larger regiments and battalions, making the historical battalions/regiments seem larger than they perhaps were. AA/Flak units comprise a fairly wide section of weapons: British 40mm, as well as the ill-used 3.7"s, German 20 and 88mm's, plus Italian 20mm's, 75's and 90mm's. Many of these guns had other tactical uses, apart from shooting down planes. Thus AA/Flak units are given a variety of ratings, most of them parenthesized. Some units, especially German 88's, can be used in many roles. These decisions were not based on innate capabilities, but rather on tactical doctrine and actual usage.

Units with Parenthesized Strengths: Certain combat units — and certain non-combat units — have parenthesized Combat Ratings. These ratings may be used only if such a unit is in a hex not occupied by Friendly combat units with appropriate non-parenthesized ratings is attacked by Enemy units.

[3.5] UNIT CHARACTERISTICS

Each counter comprises a number of TOE Strength Points. The unit's abilities are those of the TOE Strength Points comprising it (certain counters may exist if there are no TOE Strength Points in them; these possess only a Capability Point Allowance). The following is a brief explanation of the units' characteristics:

Capability Point Allowance (abbr. CPA): The unit's ability to execute movement and combat, stated numerically.

Barrage Rating: A combat strength expressing the relative capability of that unit to inflict damage when firing as an artillery piece (i.e., indirect fire).

Vulnerability: A numerical expression of a gun's susceptibility to being destroyed or captured when in a Forward Position (see Case 12.1). It is based mostly on the gun's range and tactical usage doctrine.

Anti-armor Strength: A numerical expression of a unit's ability to destroy armored vehicles.

Armor Protection Rating: The ability of an armored vehicle to withstand enemy anti-armor fire. This is based on the vehicle's armor thickness and excellence of construction.

Offensive Close Assault Rating: The ability, stated numerically, of a unit to engage enemy forces in "hand-to-hand" (i.e., Close Assault) combat.

Defensive Assault Rating: The ability, stated numerically, of a unit to defend against a Close Assault.

Anti-aircraft Rating: A numerical expression of a unit's ability to shoot down aircraft (this ability occurs, aside from anti-aircraft units, only in a few headquarters, tanks, and other units).

Maximum TOE Strength: This is, all things considered, the most important number on the sheet (see Case 4.46). It is the numerical expression of the manpower (for infantry), tank platoons (for armored units), or batteries (for guns) in that unit. The infantry manpower figures are based roughly on anywhere from 100 to 200 men, depending on the combat function of the individual and his use within the unit. The tank platoons are calculated in groups of five to eight vehicles. The gun batteries are calculated in groups of four guns.

Basic Morale Rating: A numerical (and somewhat subjective) expression of a unit's training, combat experience, and *esprit d'corps,* on a scale of +3 (excellent) to −3 (armed rabble with minimal interest in anything harmful). Certain Commonwealth units must be Trained in order to reach their listed Basic Morale.

Fuel Rate: A simplified reduction of the vehicle's miles per gallon efficiency.

Breakdown Adjustment Rating: An expression, stated numerically, of the general construction and ease of maintenance of a vehicle coupled with the level of mechanical competence of the unit performing the maintenance.

[4.0] GAME EQUIPMENT

CASES:

[4.1] THE GAME-MAPS

The game-map takes up a great deal of space (it is almost ten feet in length), and it is virtually impossible to play any scenario without all the maps. This is because of the logistical nature of the game and the emphasis on supply lines and transport. Players will also find that they will be using areas of the game-map for dropping counters, piling markers, etc. True, there are areas of the maps that will remain virtually untouched by combat units. Simply remember what's in play, and what is just being used. Playtesting of *CNA,* which usually took anywhere from six to 12 Players at any given time, revealed, among other things, that most action took place in one section of the game-maps. It can get pretty crowded in that area at times, so try to keep your displays and other information out of harm's way.

For those Players experiencing difficulties, the five Map Sections are labeled A through E and are laid long side by long side from west to east respectively (see diagram). The Map Sections should be laid so that the 01xx hexrow of a Map Section overlays the 39xx hexrow of the Map Section whose letter immediately preceeds it in the alphabet (that is, Map Section E partially overlays Map Section D which partially overlays Map Section C, etc.).
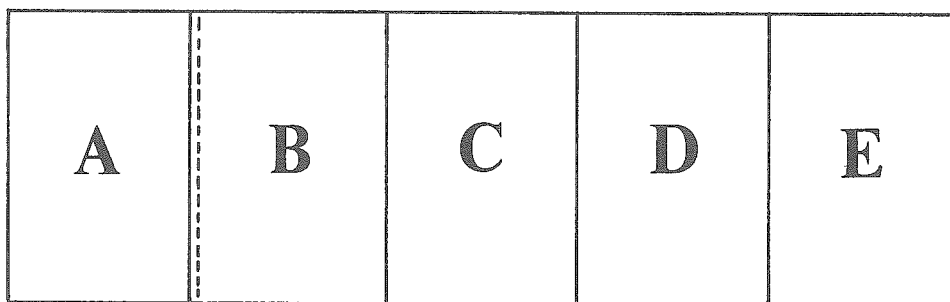
[4.2] THE COUNTERS

There are actually few counters in play at any one given time. However, each division on the game-map is comprised of a large number of lesser-sized units. These battalions and brigades might be brought into use at any given time, so the players should sort their counters into divisions, and organize their divisions so that they know where the individual units of that division are. It may even be wise to have a separate table for placement of such units.

[4.21] Sample Units

HEADQUARTERS UNIT

COMBAT UNIT

AXIS COASTAL SHIPPING UNIT

COMMONWEALTH WARSHIP

SQUADRON GROUND SUPPORT UNIT

AIR FACILITY MARKER

FORTIFICATION MARKER

AIRPLANE CLASS MARKER

[4.22] Unit Type Symbols

Infantry-Type

 Mechanized Infantry

 Motorized Infantry

 Motorcycle Infantry

Motorized Machinegun

Motorized Heavy Weapons

Motorized Marines

Infantry

Commandos

Motorized Mountain Infantry

Airborne Infantry

Machinegun

Heavy Weapons

Marines

Tank-Type

Tank

Recce-Type

Camel Recon

Recon

Motorcycle Recon

Armored Recon

Armored Car

Artillery-Type

Artillery

Airborne Artillery

Self-propelled Artillery

Coast Defense Artillery

Anti-tank-Type

Anti-tank

Tank Destroyer

Anti-tank/Anti-aircraft

Anti-air-Type

Anti-air

Heavy Anti-air

Engineer-Type

Engineer

Railroad Engineer

Road Construction

Organization Size. I = Coy, Bty; II = Bn; III = Regt; X = Bde; XX = Div; BG = Battlegroup.
Parent Formation Line. *Italics* indicate garrison; "–" indicates independent (no Parent Formation); "*" indicates that Parent Formation did not see service in North Africa; Maletti (e.g.) indicates Parent Formation; Tul/LTC (e.g.) indicates brigade/division Level Parent Formation; 288 SonIII (e.g.) indicates independent brigade-level Parent Formation.

[4.23] Counter Summary

Front / **Back**
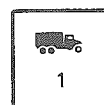
Trucks in Convoy (unattached, 2nd/3rd line) — 1
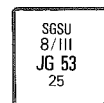
German Squadron Ground Support Unit — SGSU 8/III JG 53 25

Commonwealth/Italian Squadron Ground Support Unit — SGSU 127RAF 25

Tank Delivery (CW)/Tank Recovery (Gm) Squadron — TNKDEL A
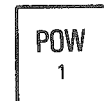
Axis POW's — POW 1 / CW POW's — POW 1

Axis Prisoner Guards — PRISON GUARD 1 / CW Prisoner Guards — PRISON GUARD 1

Desert Raider — LRDG 1

Commonwealth Warship — CA 4/8 York
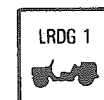
Axis Coastal Shipping — 1000 ton A
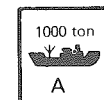
Infantry Replacement Points — INF REPL A
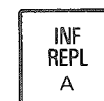
Gun Replacement Points — GUN REPL C

Tank Replacement Points — D

[4.24] Informational Marker Summary

Game-Turn — Game-Turn

Operations Stage — Op Stage

Initiative — Initiative

Front / **Back**
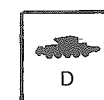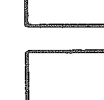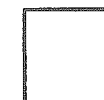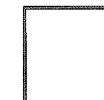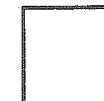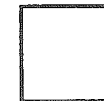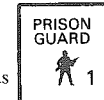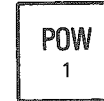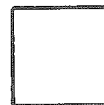
Rain Storm / SAND STORM

Construction Underway

Supply Dump — 1
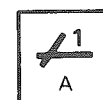
Airfield — 6 L

Air Landing Strip — 1 A

Flying Boat Basin — 3 GG

Flying Boat Alighting Area — 1 S
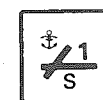
Temporary Repair Facility — Temp Repair Facility
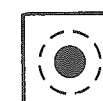
Minefield (status unknown) / Real Minefield

Minefield (status unknown) / Dummy Minefield
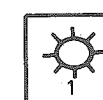
Fortification Level 1 — 1 / Fortification Level 0 — 0
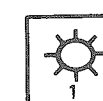
Fortification Level 1 — 1 / Fortification Level 2 — 2

Pinned — PINNED / Road Ends — Road Ends
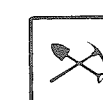
Construction Underway / Destroyed Road
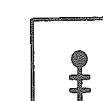
Railhead

Blocked Harbor — BLOCKED HARBOR / Destroyed Railroad

Front   *Back*   *Front*   *Back*

Counter	Description
Repair Facility Damagd	Repair Facility Damaged / Destroyed Road
FIGHTER Monoplane	Italian Fighter (single-wing)
FIGHTER	CW/German Fighter
FIGHTER Biplane	Italian Fighter (biplane)
BOMBER	Bomber
FLYING BOAT	Flying Boat
DIVE Bomber	Dive Bomber
TRANSPORT	Transport
(anchor)	Mined Harbor
PRISON CAMP 3	Axis POW Camp / CW POW Camp (PRISON CAMP 3)
A	Destroyed Tank
1	Broken Down Vehicle
A	Abandoned Vehicle
Short of Stores/ Water	Short of Stores and/or Water
(pipeline)	Destroyed Pipeline / Off Road/Track (Off Road)
(impact)	Air Bombardment/Artillery Barrage Impact

Additional counters (second pair of columns):

- Destroyed Pipeline / In Training (In Training)
- Reserve 1 / Reserve 2 (Reserve 2)
- Town/Village Well Depleted (Depl)
- Engaged / In Contact (Eng / Contact)

[4.25] Counter Deployment

A unit *attached* to another unit is not represented by a counter on the game map.

For example: The First Greek Infantry Brigade Group is comprised of the 1st Greek Brigade HQ counter, the 1st Greek Field Artillery Regiment counter and the 1st Greek Infantry, 2nd Greek Infantry and 3rd Greek Infantry Battalions counters. If the three infantry battalions and the artillery regiment were attached to the headquarters unit, the entire brigade would be represented on the game map by the headquarters counter. Unless specifically stated, all assigned units beginning a scenario in the same hex as their parent unit are attached to that parent unit. The counters representing said units are therefore not deployed on the game-map.

[4.26] Holding Boxes

Certain hexes on the game-map "attract" a large number of counters. These hexes are represented by Holding Boxes which are nothing more than large spaces for deploying all of the counters which are actually located in the hex the Holding Box is representing.

[4.3] CHARTS AND TABLES

There are an inordinate number of Charts and Tables in *CNA*. Most of them can be found in the Charts and Tables Booklet. However, some are located on separate loose sheets of paper or printed on the game-map or in the Rules booklets.

[4.4] ORGANIZATION AND ARRIVAL SYSTEM

In any given scenario, the Players receive units via the Initial Deployment (given in each scenario) and via the Reinforcement Schedules. In addition to these, Players may plan for Replacement Points to augment depleted units; the discussion of these can be found in Case 20.2. The Cases below give the Players a base for using and understanding the terminology and location of the terms and tables for acquiring and using units.

[4.41] There are three types of charts which the Player will refer to in order to gain information on his units. These are the Characteristics Charts, which show what capabilities and characteristics each unit or unit-type has (in terms of ratings and numbers), the "OA" Sheets, which list the organization of units and arrival dates for each parent unit (usually division), and the Reinforcement Schedules, which list the names and dates of all newly arriving land units. Air units have separate reinforcement charts and tables which determine their arrival.

[4.42] The following procedure is used to determine which units arrive during a Game-Turn and the abilities of those arriving units. The Player consults the appropriate Reinforcement Schedule and determines the current Operations Stage of the Game-Turn in progress; noting the units arriving, he finds the OA (Organization at Arrival) Chart for each of those units. Parent Formations are easy to find (e.g., divisions and brigades); smaller detachments arriving piecemeal are usually given their parent formation for easy reference to the correct OA Sheet. Having located the correct OA Sheet for each unit, the Player notes the Characteristics Code for each individual unit (that has arrived) in that Parent, and refers to the Characteristics Charts to determine the capabilities of those units. Each Parent unit arrives with all lesser units listed on the OA Chart, unless the unit has a later arrival date and/or is listed as excluded on the Reinforcement Track. Players should then draw up a TOE Sheet for each such Parent Formation (and its lesser units). To more clearly understand the above procedure, Players should at this time run through a sample turn of Reinforcements, using any turn on the Track. Such a brief examination will quickly show how this process operates.

Note: The Player is provided with an inter-locking series of charts and tables, each dependent on the other for information. Although there are a lot of tables and the profusion may seem confusing, just a brief scanning of these tables and tracks will be enough to show how they work. Remember, each different table or track provides a piece of information, and the tables and tracks often contain information found on the other such tracks or tables for purposes of cross-checking. Example: The Reinforcement Schedule shows the arrival of the 18th Australian Brigade. The Commonwealth Player, noting that, looks for the OA Sheet for the 18th Australian Brigade. The OA Sheet also gives the Arrival Date, which is a cross-check with the Reinforcement Schedule. The Player now notes the units within the brigade, their Characteristic Code Letters, and consults the Unit Characteristics Charts for those units to determine what their capabilities are. This information is then placed on the TOE Sheet for the 18th Brigade, along with any other information needed or desired.

[4.43] Reinforcement Schedules (see Charts and Tables)

[4.44] Aircraft Characteristics Charts

There are two identically organized Aircraft Characteristics Charts — one for each Player. Within each nationality the planes are grouped into those needing pilots and those not requiring pilots. Each plane is listed individually. Certain bear two or more rows of information. With these planes the owning Player may freely choose which line of characteristics and capabilities he will assign that plane every time he readies it. The explanation of the various ratings is discussed in Case 34.1 of the Air Game.

[4.45] Organization At Arrival Charts (OA)

A great deal of time (perhaps too much time) was spent in arriving at the most accurate Order of Battle possible. As with any major campaign, sources differed, and the designers were forced, for a variety of reasons, to make several decisions which abstracted some units (especially anti-aircraft units). We feel that *CNA* has, by far, the most accurate Order of Battle ever done for the Campaign for North Africa. However, if you have information to the contrary about a specific unit, feel free to adjust the game to fit that information. If you feel like it, we would also like to hear about that information.

There are three identically organized OA Charts, one for Allied units, one for German units, and one for Italian units. Each chart is subdivided into sections hereafter termed *sheets*. Each sheet contains game and historical information on a major unit or grouping of units (e.g., all unassigned artillery units; 50th Infantry Division) of that Player's forces. The sheet is laid out as follows: the name of the major unit or regrouping is at the top. Below that is the Basic Morale Rating for all of the counters comprising that unit (untrained Commonwealth unit's morale at instant of arrival is indicated in parentheses where needed). This is followed by a list of the counters comprising the unit and any notes at the bottom of the sheet. The counters comprising the unit are arranged with the headquarters unit (if any) for that group at the top. Any units assigned directly to that HQ are indented, and any unit assigned to a subsidiary unit is further indented and listed in the rows directly below their brigade level parent unit. The explanation of the information contained under the column headings is as follows:

Unit Name: The historical name of that unit. Certain abbreviations have been made for each nationality and they are listed at the end of the Chart.

Counter Abbreviation: The type as it appears on the counter.

ID Code: One, two, or three letters which summarize the unit's characteristics. The unit's ratings for a particular ID Code are listed on the Unit Characteristics Chart for that nationality.

TOE and Weapons Systems: A unit comprised of a single type of weapons system (i.e., TOE Strength Points with identical characteristics) bears an N(ormal), U(nderstrength), or O(verstrength) indicator. If the unit is normal, it arrives (or begins deployed) at its maximum possible TOE Strength. If the unit arrives understrength or overstrength its TOE Strength at arrival will follow the U or O. If, on arrival, a unit comprises tank, artillery, or anti-tank TOE Strength Points, the number and then the type of the different TOE Strength Points will be listed.

Arrives: The Operation Stage/Game-Turn on which the unit arrives. If the unit beings the first scenario already deployed on the map, it is noted as a D. This column is a check on the Reinforcement Schedule.

The OA Sheets are needed for a purpose other than pure numerical information. The OA Sheets list the units originally *assigned* to a Parent unit. This is important, as units assigned to a Parent unit may stack and unstack, attach and detach themselves quite freely compared to other units being attached to that same Parent unit. The OA Sheets also, on occasion, list units that were historically attached to a Parent Formation at certain times during the Campaign.

There are numerous units that are not assigned to a division. These may be brigades (the Commonwealth Player has many of these) or simply solitary battalions, artillery regiments, etc. These units are grouped on OA Sheets according to their most important assignment characteristics (i.e., all of the British unassigned anti-air units are on a single OA Sheet).

The designers of *CNA* have chosen the division/brigade/battalion terminology system because it was (1) the basic system of a majority of the units in the campaign, and (2) the system with which they were most familiar. In many places it does not reflect the actual organizational levels of a unit. This is further exacerbated by the maddening British desire to call everything a regiment or a brigade when, in fact, it *is* a battalion. Thus, the 7th Rifle Brigade is, in game terms, a battalion (actually the 7th Battalion, the Rifle Brigade) and

most of the "Tank Regiments" are battalion-size units. Most Players familiar with the campaign should have little trouble with items such as these (few people will think that the 1st King's Royal Rifle Corps is, in fact, an actual Corps).

[4.46] Unit Characteristics Charts

There are three identically organized Unit Characteristics charts, one for Allied units, one for German units and one for Italian units. The Unit Characteristics Chart lists each ID Code's maximum TOE Strength Points and its values for the various Ratings. Unless otherwise indicated on the chart, all tank, artillery, anti-tank, and certain HQ units may comprise any combination of the variety of the weapons systems listed. These units take on the characteristics of the assigned TOE Strength Points (weapons systems). A unit comprising multiple weapons systems is a single unit for all purposes. However, all actions are undertaken using the ratings of the individual TOE Strength Points (e.g., an artillery unit comprising two TOE Strength Points of eighteen pounder guns and four TOE Strength Points of twenty-five pounder guns engaging in Barrage will fire at two times the eighteen pounder gun Barrage Rating plus four times the twenty-five pounder gun Barrage Rating). Note that a unit comprising different TOE Strength Points normally possess a CPA of that of the slowest TOE Strength Point. The characteristics of the individiual weapons systems are listed on the appropriate nationality's Tank and Gun Characteristics Chart. Certain unit posses parenthesized combat ratings. These units are discussed in Case 3.4. Certain headquarters units' maximum limit in assigned TOE Strength Points are enclosed in parentheses. Any weapons system TOE Strength Points assigned to such a unit operate with parenthesized combat values. Players should note that the maximum number of assigned TOE Strength Points for British Tank Regiments (battalion-equivalents) changes slightly in early 1942, with the influx of the first American tanks. Tank regiments with only American tanks (Grants and/or Shermans and/or Stuarts) now have a maximum of 9 TOE Strength Points, not ten. The reason for this decision is not clear; the allotment of tanks to a regiment, however, was dropped from 52 to 44 when the tanks were American. This was readjusted later on.

[4.47] Commonwealth Tank and Gun Characteristics Chart
(see charts and tables)

This chart lists the values for TOE Strength Points of a specific type of tank or gun. The definitions of these characteristics are listed in Case 3.5.

[4.48] Italian Tank and Gun Characteristics Chart
(see Charts and Tables)

[4.49] German Tank and Gun Characteristics Chart
(see Charts and Tables)

[4.5] LOG SHEETS

Because of the enormous amount of information provided with *CNA,* and because of the game system devised for its use, there are a great number of Play-aids, in the form of Informational Sheets. The playing counters themselves have little combat information other than the unit designations and Stacking Points, and there are few "tracks" by which the Players can keep visual record of various supply levels. The reasons for this are many: the desire of the designer to include as much information as possible; the problem of keeping vital information secret from other Players; the fact that the game-map itself is so large that having a plethora of charts and tracks would make it necessary to rent The Hearst Estate at San Simeon

to play it, etc. Therefore, players will keep track of virtually all the information they need — which is quite extensive — on the various sheets. The following sections describe these sheets, although we hope that they have been so designed that their utilization becomes self-evident. Players should feel free to devise any other sheets or methods they feel necessary to ease the flow of the game; most of the sheets in *CNA* were "designed" by the playtesters.

One copy of each type of Log Sheet is provided with *CNA.* Players should therefore produce as many copies of each form as they need. The designers suggest you use pencils and write *lightly* to make complete erasures easy.

[4.51] The Log Sheets have been divided into four groups on the basis of their 'owning' Player's usage. This is simply a presentation decision and has no effect on who actually uses what in a game.

[4.52] Field Commander's Group

These forms are used by the Players in charge of frontline fighting combat units.

Field Commander Control Sheet: This is designed to help the Field Commander coordinate his forces. Each row on the sheet is meant for each counter on the game-map under the Player's control. These counters will normally be Division-Eq, and a few Brigade-Eq's. Space is provided for keeping track of the unit's Capability Point expenditure(s) in that Operations Stage, its Capability Point Allowance (CPA), current Cohesion Level, Actual Points the unit could contribute to a Barrage and Offensive and Defensive Close Assault, and its reserves of Ammo and Fuel. There is space for your "weekly" Stores requirements for the units as a whole (Players rarely transport Stores on Attached Trucks, because the Stores are required only once per game-week). The bottom section of the sheet is for notes, normally detailing peculiarities of certain of the units attached to the counters listed above them on the sheet.

TOE Log Sheets: There are three of these in order to ease handling five basic division formation and organization structures and counters representing Brigade-Eq and smaller units. The TOE Log Sheets are the equivalent, for play purposes, of a giant combat unit counter. Each Parent Unit possesses its own TOE Log Sheet, and on it the Players keep track of the various strengths and ratings of the units within that formation, the changes to them and the supplies and trucks carried by and attached to that unit. The sheets can all be divided into the following sections or information areas:

A. Counter Identity: This is the area on the top of the sheet. The counter's historical name, its Basic Morale, its Current Morale (if 'Commonwealth), and any other useful information (such as its assigned Parent Unit, if any, Garrison location, engineering capability, etc.) should be written in this section.

E. Logistics: This is the area marked "1st Line Transport." The area is sub-divided into Trucks Available and Supplies. The first grouping consists of two paired rows of three boxes. They are for indicating the total *attached* Trucks and of those trucks, which are currently transporting nothing, by division into Heavy, Medium and Light trucks. The second grouping is for supplies and troops and/or guns being motorized by the attached trucks by the amount and the number of trucks and the type that are carrying them.

F. Combat Information: Boxes for recording (usually the maximum) number of actual Points that the unit is capable of in each of the categories.

D. Augmentation: This is for recording the attachment of units *over* that formation's

organization structure. (See Section on Unit Organization, 19.0). The method of filling out the boxes in this section is identical to that of Maneuver and Division Assets below. Any unit going i this section is attached to the counter the Log Sheet represents, although it may be assigned to some other unit.

G. Notes: Anything appropriate, ranging from which units are out of ammo or supplies to the amount of Water required by the elements comprising the counter every Operations Stage.

C. Divisional Assets/Support Units: Applies to those units attached directly to the division and not under a Brigade-Eq HQ (unless in a Commonwealth Armored Division). The boxes are filled in the same manner as Maneuver section.

B. Maneuver Elements: These boxes are the heart of the Log Sheet. They are where the information for the main combat forces comprising the counter is recorded. Basically, each box is used to record a single counter (i.e., attached unit). The information to be recorded consists of the unit's type, CPA, Fuel and Breakdown Rates (if any), current TOE Strength, name, and its ratings for barrage, anti-armor, vulnerability, armor-protection, offensive close assault, defensive close assault and anti-aircraft. Information concerning whether the unit is simply attached to the unit without being assigned, and/or is assigned to another parent unit or is a garrison unit, etc., is best recorded in the notes section. A tank or gun unit that is comprised of more than one weapons system (i.e., type of TOE Strength Point) will require more than one box to represent the unit (as many boxes as there are weapons systems). A unit assigned but not at present attached to the unit whose Log Sheet you are handling still occupies space within the formation's organization. This space may not be filled by attaching other units in its place. For ease of play, fill in "detached" in the box of such a unit.

The recorded information may be written in or adjacent to the unit's box in any manner the Player desires as long as he and the other Player's have no problems in reading it.

Brigade TOE Log Sheet: This is used for counters representing Brigade-Eq and smaller units. The formation's organization limits can be found by using the Formation Organization Chart and the Formation Attachment Chart. It is useful to put these limits in the Notes Section. As this is a multi-purpose form, the boxes in the Maneuver Elements and Augmentation sections are unadorned and can be divided in any manner necessary.

Infantry Division TOE Log Sheet: The boxes in the Maneuver Elements section are organized in a very restricted fashion. Some of the boxes in the Divisional Assets and all of the boxes in the Augmentation sections are unadorned to permit recording of multiple weapons systems occurring in the same unit. The division's organization and augmentation limits can be determined from the charts indicated above.

Allied and Italian Armored and German Division TOE Log Sheets This is free form with the boxes unstructured so as to permit the expected variations in both multiple weapons systems in a single unit and variations in division organization.

[4.53] Rear Area Commander's Group

This group belongs to the Player in charge of construction, demolition, mopping up operations, and other rear area jobs having nothing to do with supplies. (The Player will usually have a Trucks and Major End Items Control Sheet as he will normally be assigned some trucks in order to handle routine operations without bothering the Logistics Commander).

Vehicle Repair Control Sheet: Permits the Player to handle all broken down vehicle, destroyed tanks and abandoned vehicle counters.

Naval Convoy Log Sheet: While designed primarily for Axis strategic Naval convoys it is also used for either Player's tactical shipping. The sheet permits keeping track of naval transport, its location, destination, transit, what is being transported, etc.

POW Control Sheet: Designed to handle all POW's, their Capability Points expended, location and inhabitation of the POW Camps, and the TOE Strength and infantry-type of their Guards.

[4.54] Air Marshal's Group

The Player in charge of all the airplanes uses the following two forms and usually the Supply Dump Control Sheet to simplify required aircraft supply expenditures the aircraft require.

Squadron Ground Support Unit Sheet: The sheet contains space for controlling six squadrons of planes, the maximum number that can be berthed at an airfield. Each squadron section permits counter location, basic composition, aircraft characteristics recording, and the state and Mission of each plane in the squadron.

Air Mission Log Sheet: Permits the Player to coordinate all air missions assigned in that Operations Stage/Game-Turn, by hex and by squadron supplying the planes.

[4.55] Logistics Commander's Group

The Player in overall charge of supplies.

Trucks and Major End Items Control Sheet: Used for the Player's Truck Convoys. Organized to identify, within each counter, the number of each type of truck in the convoy, what supplies are being transported and by what trucks; which trucks are 'empty', any replacement points, repaired vehicles, returning Guards, etc., being returned or exchanged between units.

Supply Dumps Control Sheet: Enables the Player to keep track of the supplies and location of each of his supply dumps. It is strongly suggested that the Logistics Commander determine which of his dumps will be actively or constantly used and those which are not and separate them into different sheets, as the actual supply dump counter ID number has no effect.

General Supply Net Sheet: The Logistics Commander's chief headaches are how much supply does he have, how much is coming in, and how much of that supply is likely to be used in the near future. This sheet is set up to help prevent him from running out of a supply by accident, as it were, either locally or strategically.

Supply Requisition Form: The Logistics Commander is in charge of disbursing these to the various Field Commanders and Air Marshals. This may seem humorous at this point, but the form proved quite helpful in maintaining good supply organization, and it sure beats yelling at the top of your voice for 100 gallons of fuel.

[4.6] INVENTORY OF GAME PARTS

One Game-Map (five sections)
Nine sheets of 200 die-cut counters (1800 total)
One Land Game Rules Booklet
One Air & Logistics Game Rules Booklet
Two Charts & Tables Booklets
One 5/8" and one 3/8" plastic die
One Game Box assembly
One 22" × 34" log sheet
One Historical Article Booklet

If any parts are missing or damaged, write, fill out the enclosed Complaint Card and return to SPI for replacement. Note: The process used to manufacture counters sometimes results in images being slightly off-center or in colors spilling along the edges of differently colored counters. Counters displaying such minor imperfections cannot be replaced by SPI. Only in cases where the counters are not legible can SPI supply replacement parts.

THE LAND GAME

In the Land Game, the Players deal with the fine distinctions of terrain and local and variable weather encountered by the actual combatants. The interlocking and detailed movement and combat systems permit the Players to recreate real time and space "continuous" movement and combat. The organization and equipment rules create voluminous options, allowing the Players to deploy and maneuver company level and larger forces with equal ease while at the same time differentiating between raw, poorly motivated, or badly armed units and veteran, well motivated, well equipped forces as well as changes in the *same* unit from one state to the other.

[5.0] THE SEQUENCE OF PLAY (Land Game)

[5.1] THE GAME-TURN

In *CNA* each Game-Turn covers a period of approximately one week. However, to better handle combat operations, each Game-Turn is divided into three Operations Stages. Each Operation Stage is the equivalent of 2-3 days of activities and, within each such Stage, each Player performs a sequence of events covering all aspects of the game. Thus the Players complete their operations within one Operations Stage, proceed to the second, and then the third, thus finishing one full Game-Turn. Certain operations are performed only at the beginning of the actual Game-Turn. Most of the game operations — movement and land combat — are performed within the Operations Stage. The basic unit of time within the game is thus the Operations Stage.

[5.2] LAND GAME GAME-TURN SEQUENCE OUTLINE

This Sequence of Play applies when playing the Land Game without the Air and Logistics Games.

I. INITIATIVE DETERMINATION STAGE

The Players determine who will have the Initiative for the coming Game-Turn (Section 7.0). The Player going first within an Operations Stage (below) is known as Player "A"; the other as Player "B."

II. NAVAL CONVOY STAGE

A. Naval Convoy Schedule Phase

The Axis Player plans what specific cargoes the ships will carry and their routes. See Section 32.0 or Section 56.0. The Axis Player plans for the arrival of future Replacements from the Axis Replacement Points Pool. Likewise, the Commonwealth Player consults the Commonwealth Production Table and determines how many Replacement Points he will receive two turns hence and plans for their arrival.

B. Tactical Shipping Phase

Both Players plan the transport of cargo between African ports. **Note:** The Axis Coastal Ships are represented in the game by counters. Allied coastal shipping is not represented by counters and is limited only by the port capacities.

III. FIRST OPERATIONS STAGE

A. Initiative Declaration Phase

The Player who gained the Initiative in Stage I now states whether he will be Player "A" or Player "B" for this particular Operations Stage.

B. Weather Determination Phase

The Player with Initiative rolls for Weather (29.0).

C. Organization Phase

The following segments are undertaken in any order desired.

1. *Reorganization Segment:* Attachment and/or assignment of Reinforcements, Replacements or any other non-assigned units including Trucks may be undertaken. Detachment of units may also be accomplished.

2. *Construction Segment:*
   a. Construction Completion Step: Any work scheduled for completion is finished, removing and adding any markers necessary. Units that have finished construction are free to move.
   b. Construction Initiation/Continuation Step: any units beginning or continuing work on projects are noted. They may not voluntarily move in the remainder of the Operations Stage (Exception: Reaction).

3. *Training Segment:*
   a. Training Completion Step: Units and Replacement Points completing a level of Training are noted and the effects in Morale applied.
   b. Any units beginning or continuing Training are noted. They may not move voluntarily in the remainder of the Operations Stage (Exception: Reaction).

D. Naval Convoy Arrival Phase

All Reinforcements, Replacement Points and Ammo Points scheduled for Arrival (and actually arriving) appear in their designated Ports of Arrival or Entrance hexes.

E. Commonwealth Fleet Phase

1. *Fleet Assignment Segment:* The Commonwealth Player assigns his ships to any sea or coastal hexes.
2. *Fleet Repair Segment:* Any Repair work on ships is undertaken at this time.

F. Reserve Designation Phase

Player "A" designates which of his units he is placing in Reserve Status, indicating such with a Reserve I marker (see Section 18.0).

G. The Movement and Combat Phase

The following four Segments comprise the Movement and Combat Phase. Player "A" may if he so wishes, repeat Segments 1 through 4 as many times as he desires within the restrictions of the Continual Movement Rules (8.2). Each repetition must include all four segments.

1. *Movement Segment:* All units, except unattached Trucks and Tank Recovery Squadrons, not in Reserve and capable of being moved may be moved. Non-Phasing (Player "B") units may React if permitted and Player "B" wishes to do so.
2. *Breakdown Determination Segment:* All vehicles and motorized units of both sides check for Breakdown (2.10). Broken down vehicles are indicated by a marker.
3. *Combat Segment:* (Combat is resolved as follows see Sections 11.0 through 15.0).
   a. Position Determination Step: Both Players determine the "position" of all Gun-and Armor-class units.

b. Barrage Step: Both Players secretly plot and then execute any Barrages.
c. Retreat Before Assault Step: Player "B" may Retreat Before Assault any of his units permitted to do so.
d. Force Assignment Step: Both Players secretly assign TOE Strength Points to Anti-Armor or Close Assault. Player "A" determines which Assaults will be Probes (although he need not reveal this decision) and which TOE Strength Points will be withheld from Assault.
e. Anti-Armor Step: Both Players simultaneously resolve any Anti-Armor Fire, removing all casualties. Placement of Destroyed Tanks markers are made if necessary.
f. Close Assault Step: Close Assaults are resolved in any order that Player "A" desires. He announces which Assaults are actually Probes after each is resolved.

4. *Reserve Release Segment:* Player "A" may release any of his Reserves that he wishes.

H. Truck Convoy Movement Phase

Player "A" may move his Second and Third Line Trucks (unattached) and any POW's and Guards.

J. Commonwealth Rail Movement Phase

If Player "A" is the Commonwealth Player he may utilize Rail Movement (8.7) for units and/or Supplies.

K. Repair Phase

1. *Towing Segment:* Player "A" may tow Broken down and Recovered vehicles.
2. *Maintenance Segment:* Player "A" may attempt to Repair Broken down or destroyed vehicles which were not towed in this Phase.

L. Patrol Phase

If the Phasing Player has not engaged in Assault, he may use Patrols for reconnaissance purposes.

At this point Player "B" undertakes Phases F through L, replacing any references to "A" with "B" and "B" with "A".

IV. SECOND OPERATIONS STAGE

Both Players repeat *all* facets of the First Operations Stage.

V. THIRD OPERATIONS STAGE

Both Players repeat *all* facets of the First Operations Stage.

VI. END OF GAME-TURN

You have now completed one Game-Turn, a full week of the real campaign. Take a breather, have a beer and a sandwich, contact your loved ones to let them know you're still alive, and return for another Game-Turn.

[6.0] THE CAPABILITY POINT SYSTEM

GENERAL RULE:

CNA uses a Capability Point system to control *all* aspects of a given land unit's abilities. A unit's Capability Point Allowance (CPA) is a numerical representation of a unit's ability to undertake any and all functions: movement (including retreats and advances), combat, loading, transporting, construction, etc. There is not a function in the game that will not cost a unit some of its CPA (with some minor exceptions). CPA thus regulates each and every aspect of play. Under certain circumstances units may exceed their CPA. To do so will affect a unit's *Cohesion*, earning it *Disorganization Points* (which may affect Morale). Yet, the ability to exceed its CPA allows a unit to stretch itself to the limit, to perform feats it might

not ordinarily perform — at a price. Players should thus keep close track of each unit's CP's expended and its Cohesion Level on the Sheets provided.

CASES:

[6.1] HOW THE CPA SYSTEM WORKS

[6.11] Each unit has a Capability Point Allowance (CPA). The CPA for each unit is given on the OA Sheets. Certain Gun units have a CPA of "0;" these units are considered to have a CPA of 10 for all purposes other than movement.

[6.12] *Every* function that a unit would need to perform costs that unit some portion of its CPA. The costs of each such function are listed on the Capability Point Cost Table, Section 6.3. Except where noted, everything a unit does costs CP's.

[6.13] The CPA for a given unit refers to the number of Capability Poins that unit may use in a given Operations Stage without earning *Disorganization Points* (See 6.2). Thus, a Tank Battalion with a CPA of '25' could use 25 CP's in an Operations Stage without garnering any Disorganization Points.

[6.14] The allotment of CP's for an Operations Stage refers to *both* Players' portions of that Operations Stage. Thus, if the Axis Player goes "last" in a given Operations Stage any CP's used by his units in Retreating, Reacting, etc., during the Commonwealth portion of that Operations Stage are counted against those units' CPA's for that Operations Stage. As the Operations Stage progresses, Players should keep track of CP's expended by units on either the TOE Sheet for that unit or on the Field Commander Control Sheet.

Example: At the beginning of the first Operations Stage of the September III, 1940 Game-Turn (Game-Turn 1), the First Royal Northumberland Fusiliers (a non-motorized Machinegun battalion at this point) has a CPA of *eight*. To start the game, the Italians move and attack the 1st RNF. They have no artillery and do not barrage. The Allied Player decides to Retreat Before Assault three hexes at a cost of *six* CP's. The 1st RNF did not use any CP's to defend, and the Italians did not expend any CP's to Close Assault, as the Allied unit retreated before any could be expended. Thus when the Commonwealth Player begins *his* portion of that Operations Stage the 1st RNF battalion will have only *two* CP's remaining before it exceeds its CPA and earns Disorganization Points.

[6.15] The CPA of a "Parent Formation" (e.g., division, brigade, etc.) is that of the *lowest* CPA of the units comprising that parent formation, regardless of the CPA of any higher-CPA units. If the British 7th Armored Division was to move as an entity (consult the OA Sheet for the 7th Arm. Div) it would move with a CPA of '10', or that of its lowest-CPA unit — the 1st KRRC (without trucks).

[6.16] A unit does not have to use all of its CP's in a single Operations Stage. However, CP's not used in one Operations Stage do *not* carry over into the next Operations Stage (unlike Cohesion Levels, which do). They are not transferrable from one unit to another (although an infantry unit may assume the CPA of a truck if it is *motorized*; see 6.17).

[6.17] Certain units may become "motorized" during the game: i.e., Infantry units (those units with a basic CPA of 10 or less) may use Truck units to transport them. Infantry units being thus transported by Truck units assume the CPA of the Truck unit carrying them. Thus, if the 1st RNF were to be motorized by Medium Trucks it would now have a CPA of '20', instead of '8'. (See also Section 8.9). Anti-air units with listed CPAs of

0 + may be motorized by assigning one Medium or one Heavy Truck Point per TOE Strength Point of Artillery.

[6.2] COHESION

Cohesion represents a unit's state of exhaustion and disintegration (Disorganization) or elation (Reorganization). A unit with a Cohesion Level of "0" is its normal self. A unit in Disorganization, with a *minus* Cohesion Level, has probably been exerting itself beyond the normal call of duty, while a unit with a *plus* Cohesion Level (Reorganization) has been winning battles. The Cohesion Level of a unit affects its Morale Level at the instant of combat, which in turn will affect its performance in that battle. (See Section 17.0.)

[6.21] Whenever a unit exceeds its CPA within a given Operations Stage it earns *Disorganization Points* (DP's). For *each* Capability Point that a unit uses *over* its CPA it earns *one* Disorganization Point. Thus, a unit with a CPA of '15' that uses 18 CP's in an Operations Stage earns *three* DP's. [A unit may also earn DP's as a result of combat.] If a unit (Parent Formation as well as all units in that formation) suffers losses of 30% or greater in any *one* Close Assault it earns *three* DP's. (See also 15.29b).

[6.22] DP's are used to decrease the Cohesion Level of a unit. Thus a unit with a Cohesion Level of −1 that earns three DP's now has a Cohesion Level of −4. DP's accumulate from Segment to Segment; they may be negated only by certain actions on the part of the unit (See 6.23). Furthermore, DP's are credited *immediately* — not at the end of an Operations Stage. Example: the 1st RNF, with a CPA of '8' and a Cohesion Level of −2 has expended five CP's in a Movement Segment. It then assaults an Italian unit, expending the five CP's necessary to do so. The 1st RNF has thus exceeded its CPA by *two*, earning 2 DP's and reducing its Cohesion Level by that *two* to −4. The decrease in the Cohesion Level takes place *before* the Close Assault is resolved and the 1st RNF uses its new Cohesion Level of −4 in computing any changes to Morale.

[6.23] A unit's Cohesion Level may be increased by earning Reorganization Points (RP's). Under no circumstances, however, may a units Cohesion Level ever go higher than *plus ten* (+10). RP's earned are added to a unit's Cohesion Level in such a way as to make it "better". Thus a unit with a Cohesion Level of −3 that earns five RP's has a new Cohesion Level of +2. RP's, like DP's, are applied immediately.

[6.24] RP's are earned under the following circumstances:

1. For each Operations Stage in which a unit uses absolutely *no* CP's (except for a unit undergoing Training or conducting Training; see 18.3) that unit earns *five* RP's. However, no unit may ever increase its Cohesion Level above '0' by this method. Thus, a unit with a Cohesion Level of −1 that uses no CP's for an entire Stage would have a Cohesion Level of '0' at the end of that Stage (not +4).

2. For each Close Assault in which a unit participates where the defending unit vacates its hex completely as a *direct* result of that Close Assault (*not* Reaction or Retreat Before Assault) that unit (victorious) earns *three* RP's.

[6.25] A unit with a positive Cohesion Level (e.g., +3) may have its *Basic Morale* increased in a given Close Assault, while a unit with a negative Cohesion Level (e.g., −12) may have its Morale lowered for a given combat (see Case 17.2).

[6.26] A unit with a Cohesion Level of −26 (or worse) may not move, attack, or defend. If an enemy *combat* unit moves adjacent to it it Sur-renders, regardless of the size of the enemy unit. Such "disorganized" units may, however, refuel, and they do consume Stores and Water. (Note, that a unit may get a level of worse than −26 if it performs a *single* action, such as an attack that would jump it past the −26 level.)

[6.27] If a Player has more than one unit (or individual combat counter) in a given Close Assault, and those individual units have different Cohesion Levels, then the Cohesion Level of the largest (in terms of type: division, brigade, etc.) unit prevails. (Use the Stacking Points to determine the "largest" unit.) When determining any adjustments to Morale through Cohesion Level, if there is more than one "largest unit", then the Cohesion Levels of all "largest units" are added together and divided by the number of contributing counters.

Example: Three brigades are assaulting an enemy unit. The Cohesion Level of the Brigades is −4, −1 and +3, respectively. The Player adds the three together (−4 + (−)1 + 3 = −2, and then divides by three (−2 ÷ 3 = −1, rounding to the nearest whole number). The Cohesion Level for that battle is thus −1.

[6.28] If a Parent Formation has many units within it that have different Cohesion Levels the largest unit within the Parent Formation prevails, as per Case 6.27.

Example: An extreme example — and one not likely to occur — is one where a Parent Formation has three Brigades, all with different Cohesion Levels; in addition, one of the Brigades contains three battalions, each with a different Cohesion Level. The Cohesion Level for the latter Brigade would have to be determined before averaging the three Brigades to get the final Cohesion Level. Again, this will rarely — if ever — occur.

[6.29] Notwithstanding anything said in 6.27 or 6.28, each unit's Cohesion Level is kept track of individually. As most units in a Parent Formation will have the same level at all times, this will not prove to be too big a problem.

[6.3] CAPABILITY POINT COST SUMMARY
(see Charts and Tables)

[7.0] INITIATIVE

GENERAL RULE:

Initiative is an abstract, numerical rating representative of the strategic leadership capabilities of a given army. It is used, in the game, to determine who has the *choice* to act first within a given Operations Stage. The fact that a Player has the ability to choose when he will move is a great advantage, and the army with better initiative will often find that it has the upper hand operationally — if not materially.

[7.1] THE MECHANICS OF INITIATIVE

[7.11] The Player who has "Initiative" for a Game-Turn may choose whether he wishes to move first or last in a given Operations Stage.

[7.12] The Player who will have the Initiative is determined at the beginning of each Game-Turn (not Operation Stage). The Player who gains the Initiative keeps that Initiative for all three Operations Stages in that Game-Turn. Thus, the Player with Initiative may choose to move first in the first Operations Stage, last in the second stage and then first in the third Stage (which would give him, in effect, two "turns" in a row).

[7.13] Each side possesses an Initiative Rating (7.2), which is dependent on the date of the Game-Turn.

[7.14] To determine which Player has the Initiative for a given Game-Turn, each Player, in the Initiative Determinate Stage, rolls one die and adds his Initiative Rating to the result of the thrown die. The Player with the highest total (ties roll again) gains the Initiative. Thus, in October of 1940, if the Italian Player, with an Initiative Rating of '1', were to roll a '4' and the Commonwealth Player, with an Initiative Rating of '3', were to roll a '1', the Italian Player would gain the Initiative by virtue of having a total of five (1 + 4 = 5) to the Commonwealth total of '4' (3 + 1 = 4). The Italian Player would now be able to choose, in his Initiative Declaration Phase, whether he wants to move first or last in the Operations Stage for each of three Operations Stages in the Game-Turn.

[7.15] The Player with Initiative for the first Game-Turn of a given scenario is usually predetermined. Check the individual scenarios for who has the Initiative for the first Game-Turn.

[7.16] For purposes of the Sequence of Play, the Player who moves first in an Operations Stage is called "Player A"; the Player who moves last in an Operations Stage is called "Player B".

[7.2] INITIATIVE RATINGS CHART

This chart lists the Axis and CW initiative ratings for all units at any given point in the game. (See Separate Sheets)

[8.0] LAND MOVEMENT

GENERAL RULE:

In *CNA*, Land Movement is a function of the CPA of a unit. Most Movement occurs during the Movement Segment of the Movement/Combat Phase. During the Movement Segment, the Phasing Player (i.e., the Player who is in the process of moving) may move as many or as few of his units as he wishes. They may be moved in any direction or combination of directions, limited only by their CPA's, enemy Zones of Control, Terrain restrictions and, in the case of motorized units, Fuel consumption and Breakdown. Under certain conditions (Reaction and Retreat Before Assault) the non-Phasing Player may move his units.

PROCEDURE:

Units are moved one at a time, or in stacks, tracing a path of contiguous hexes through the hex grid. As a unit enters each hex it must expend a portion of its CPA for entering that hex or crossing a particular hexside. All terrain costs are listed on the Terrain Effects Chart (8.37). In addition to Movement costs, Players must pay attention to Breakdown costs for vehicles moving through certain hexes (see Section 21.0).

[8.1] HOW TO MOVE UNITS

[8.11] Units may be moved voluntarily only during the Movement Segments or Retreat Before Assault Step. Voluntary movement may never take place out of the Sequence of Play. Players should note that while Player A may be the Phasing Player, Player B has several opportunities to move his units during A's Segment. All movement, of any type, expends CP's. Furthermore, if the unit moving is a vehicle (armored units, self-propelled artillery and trucks), the Player must check for possible Breakdown (see Section 21.0). Units may move freely through Friendly units, with the exception of movement along roads and tracks (see Case 8.34).

[8.12] Under certain conditions — usually combat — a unit may be *forced* to Retreat. This is considered *involuntary* movement, in that the retreat-

ing Player does not move by his own choice but rather as a direct result of combat. However, involuntary movement also requires expenditure of CP's and checks for Breakdown.

[8.13] A unit may never enter a hex containing an enemy unit (see, however, Case 27.4). Furthermore, movement from hex to hex must be consecutive; units may not skip hexes. (There are, of course, different rules for aircraft.)

[8.14] If a unit moves into an enemy Zone of Control (10.0) it must stop immediately. It may move no further in that Movement Segment and will probably have to attack, in some form, the enemy unit exerting that Zone of Control.

[8.15] A unit that *begins* a Movement Segment in an enemy Zone of Control *may* move out of that hex and continue movement under the following conditions:

1. It may *not* move directly into an enemy Zone of Control (however, see Case 10.24); and
2. It must pay a cost of *two* CP's if the units are in "Contact" (see Case 8.62); *or*
3. It must pay a cost of *four* CP's if the units are "Engaged" (see Case 8.63).

[8.16] Units may continue to move and fight as long as they wish, with certain restrictions (see Case 8.2). They may exceed their CPA in an Operations Stage; however this will affect their Cohesion Level.

[8.17] Non-motorized units — those units with CPA's of *ten* or less — may never *voluntarily* expend CP's greater than 50% of their base CPA during *their* portion of the Operations Stage (An '8' could not go higher than '12', a '10' no higher than '15'). Remember, Reaction and Retreat Before Assault are not voluntary movement in your own portion of an Operations Stage; they occur in the other player's portion of the Operations Stage. Furthermore, no unit with a Cohesion Level of −26 or worse may move.

[8.18] Second and Third Line Trucks (i.e., Truck Convoys; see Section 8.9) have their own Movement Phase: The Truck Convoy Movement Phase. Such trucks may *not* move (voluntarily) in the normal movement segments. Only trucks directly attached to, and part of, a combat unit or HQ may move in the normal Movement Segments. Trucks become attached and/or detached in the Organization Segment of the Sequence of Play.

[8.19] No Commonwealth Land unit may be moved west of Marble Arch (A2109) at any time, for any reason. (This solves a great number of playing problems, and also reflects Commonwealth operations considerations and strategy.)

[8.2] THE CONCEPT OF CONTINUAL MOVEMENT

CNA uses a concept called "Continual Movement". Under this concept a given unit does not possess a set Movement Allowance which it may never exceed, as in most wargames. Rather a unit has a Capability Point Allowance. If a Phasing Player wishes to push his units past their CPA he may do so, knowing that it will affect that unit's Cohesion. In Continual Movement a unit may continue to move even after it has engaged in combat, moving and fighting as long as the Phasing Player wishes, within certain limits.

Continual Movement generates certain problems in terms of Time-and-Space Relationships. The rules attempt to account for the fact that time passes while one unit is moving; that other units are not standing still.

[8.21] Units are not limited as to the number of times they may move and engage in combat during a given Operations Stage except for Cases 6.26,

8.17, and 8.23. Thus, a unit may move adjacent to an Enemy unit, engage it in combat, move away (or stay), engage the same or another unit in combat, etc., as the Phasing Player wishes. The unit simply expends CP's for *all* actions it performs.

[8.22] Within a given Movement/Combat Phase there may be several segments of Movement and Combat. These are, to a certain extent, regimented. In essence, the Phasing Player moves his units. He then, after all such movement is completed, resolves any combat. He may then again move any of his units (within the exceptions mentioned in 8.21); after all movement at that time is completed any combat necessitated or desired is resolved. This cycle is repeated until the Phasing Player no longer wishes to move his units or have combat. Remember, no combat occurs until *all* movement has ceased within each Sequence of Movement and Combat.

[8.23] Only those Phasing units that have finished a Movement Segment within *two* hexes of an enemy unit are free to move again. A Phasing unit that finishes its movement more than two hexes from an enemy combat unit may not continue to move during that Movement *Phase,* regardless of the number of CP's remaining, unless that is a unit that has been placed in Reserve Status (18.0). Players should note that Reserve Status is an exception to 8.22.

[8.24] A Phasing unit that begins *any* Movement/Combat Phase in the Zone of Control of an Enemy unit must expend *two* CP's to break "Contact" — or *four* CP's, if such position was brought about by an "Engaged" result on the Assault CRT — if it wishes to move. (Note, that in the case of an Engaged result, the presence of an enemy ZOC does not matter.)

[8.25] A Friendly unit may attack a given Enemy unit more than once in a given Operations Stage, with neither unit ever moving! However, each combat occurs *after* all movement of other units cease. If there is no movement by any units, combat may still proceed for as long as the Phasing Player wishes, providing he has the necessary Ammunition and wishes to expend the required number of CP's.

[8.3] TERRAIN EFFECTS ON MOVEMENT

[8.31] Units expend a varying number of CP's to enter hexes or cross certain hexsides, depending upon the type of unit and/or what type of hex or hexside is involved. The costs range from ½ CP for roads (for motorized units) to +8 for a vehicle to move down an escarpment via a track or an infantry-type unit to cross The Nile without a "bridge". See the Terrain Effects Chart for all effects (8.9).

[8.32] Certain types of hexes and/or hexsides are prohibited to certain types of units. E.g., certain vehicles may never enter a Salt Marsh hex, unless it is on a road or track.

[8.33] Roads and Tracks may be used to facilitate movement through terrain obstacles and speed movement over the entire game-map. For a unit to gain any benefit from movement on a Road or Track it must move from one Road/Track hex directly into an adjacent, connecting Road/Track hex through a Road/Track hexside. Units which are moving along Roads or Tracks ignore, for movement purposes, any other terrain in the hex or hexside, with the exception of vehicles crossing Escarpments (see 8.42).

[8.34] A unit comprised (at least in part) of vehicles (i.e., tanks, trucks, artillery, etc.) that is moving along a Road or Track is limited in its ability to move through other Friendly units on the Road or Track in that hex; see Case 9.33. Such

moving units may always pass around Friendly units that are on a Road or Track by moving through the terrain in the hex, i.e., bypassing the units on the road by moving off the road and around them, going back on the road in the next hex.

[8.35] Most of the terrain in *CNA* is self-explanatory, especially when the Terrain Effects Chart is consulted. However, at this point it would help to be able to visualize the difference between *slopes, ridges* and *escarpments.* An idealized side-view of each of the above types of terrain is provided below so that players can see what is being abstracted:

| Slope | Ridge | Escarpment |
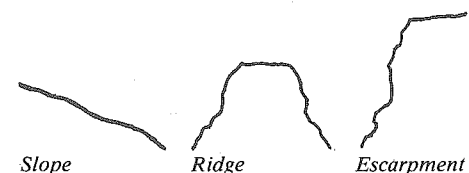
Slopes and *Escarpments* always have an "up" side and a "down" side (see the Terrain Key). The splash contours of the respective terrain symbols are always on the "down" side of the slope or escarpment. Thus, when a unit is crossing a slope or escarpment hexside it is moving either up the slope/escarpment or down the slope/escarpment.

Ridges have no "direction"; crossing a Ridge hexside has the same effect regardless of which direction the unit is coming from. In essence, ridges are two-sided slopes.

[8.36] Certain types of terrain restrict combat or give the attacker or defender a combat benefit. These benefits are discussed throughout the sections on Combat, but they are all summarized on the Terrain Effects Chart.

[8.37] Terrain Effects Chart
(see Charts and Tables)

[8.4] SPECIAL TERRAIN EFFECTS ON MOVEMENT

For those gamers used to *Panzerarmee Afrika* and *Afrika Korps*, the game-map of *CNA* will come as something of a shock and a revelation: there *is* terrain in all those empty spaces. And much of this terrain is unlike that of anywhere else on earth, bringing with it special problems for both designer and player. The most important of these are discussed below.

[8.41] *Wadis.* Wadis are, in essence, dried-out river beds. There are several major areas of wadis in North Africa. While the series of wadis that "guards" the Libyan Sand Desert, south of Cyrenaica, is the largest group, perhaps the most important series of wadis are those extending like fingers from the Jebel Akhdar (game-map B). Along with the other difficult terrain in the area, the wadis of the Jebel Akhdar greatly hinder rapid movement.

All units expend CP's to cross a Wadi hexside. (All wadis in *CNA* have been placed along hexsides, with the exception of the Wadi Natrun, just west of the Nile Delta, which is treated, for game-purposes, as if it were Salt Marsh.) In addition, there is a Breakdown Factor of *eight* for vehicles crossing a wadi hexside. Roads negate wadis for movement purposes, while Tracks halve the cost to cross. Vehicles crossing a Wadi on a Road use the *Road* Breakdown Rate (½ BP), while vehicles crossing on Tracks garner *four* BP's, not eight.

Players should note that in an Operations Stage in which the Weather is *Rainstorm* wadis in affected map sections are impassable at *all* points, *except* where they are traversed by roads. The cost to cross a rain-swollen wadi by Road is +2 CP's;

there is no additional Breakdown cost (i.e., it is still ½ BP).

[8.42] *Escarpments.* The escarpments, which were such an integral part of the Desert Campaign, are at the edge of the Libyan Plateau, which rises from the edge of the strip of land that borders the Mediterranean. In some places the rise is gradual; in others it is sharp and severe, virtually uncrossable by vehicles. Movement costs for crossing escarpment hexsides are listed in the Terrain Effects Chart (8.37). However, other factors must be noted. No vehicle may *ever* move "up" an escarpment (i.e., cross an escarpment hexside by moving from the down side to the up side). If a Track crosses an escarpment hexside, vehicles may use the Track to move *down* the escarpment, but never up. The cost for moving down via Track would be + 8 CP's and *six* Breakdown Points.

[8.43] *Slopes* and *Ridges.* These were discussed in 8.35. All units may cross these hexsides at a variety of Movement and Breakdown costs; see 8.37.

[8.44] *Salt Marsh.* Salt marshes are depressions consisting of very fine and treacherous salty sand —a veritable quicksand grave for vehicles, and no fun for infantry either. Vehicles, except for Light Trucks, Recce-type units, and motorcycle infantry may enter or leave a Salt Marsh hex only on a Road or Track. A prohibited vehicle that enters a Salt Marsh hex without using the Track, whatever the reason, is Abandoned (see 5.33). Because most vehicles are prohibited from entering Salt Marshes in a normal manner, *no* motorized unit or AFV (tank, armored car, etc.) may ever engage in Assault with units defending in a Salt Marsh hex. The one camel unit in the game (the Italian Meharisti Camel Cavalry) travels as *infantry* in non-track Salt Marsh hexes, as these hexes could not support *loaded* camels.

[8.45] *Desert.* Desert hexes, which comprise the area known as the Libyan Sand Desert, contain soft, shifting sand (as opposed to "Clear" hexes, which have a clay-like substance more supportive of vehicular traffic.) Desert hexes are forbidden to Light Trucks, Motorcycle infantry, and motorcycle Recce units whose weight was not sufficient enough to provide the traction necessary for moving vehicles through the soft surface. Such units may not enter any Desert hexes, whether traversed by Tracks or not. See 8.37 for all terrain costs.

[8.46] *Tracks.* The major communication network of the North African Plateau is the series of tracks that criss-cross the entire area. The tracks are useful not in that they are easier to walk or ride in (in some places they are no easier than the terrain *in* the hex); what they do provide is direction — i.e., which way to go. Sense of direction in the "desert" is almost non-existent; the tracks provide that. Movement along tracks is at 1 CP per hex and halves most hexside crossing CP costs. In addition, units using a track pay only one-half the normal Breakdown cost for that hex.

[8.47] *Railroads and Roads.* The use of these two are discussed quite succinctly in the body of the rules. However, Players should note that, on the game-map, there are large sections of railroad and some roads that are not constructed as of September 1940 and must be constructed to exist. Specific later scenarios will list the hexes that have been constructed by that time. Unconstructed railroad hexes are ignored for all purposes. Unconstructed roads are treated as tracks.

[8.48] *Oases* do not affect movement. But it might be worthwhile to point out here that Oases are considered to be nondiminishing Supply Dumps for Water and Stores.

[8.49] All of these terrain types also affect combat. However, such effects are discussed in the various combat Sections, especially 15.3.

[8.5] REACTION

Reaction is the capability of a unit to "get out of the way" of an attacking unit or units before the enemy can launch an attack against the reacting unit. Reaction is movement conducted by the non-Phasing Player — as defender — in the opposing Player's Movement/Combat Phase. A unit's ability to react is limited to certain specific situations. Reaction expends CP's.

[8.51] Reaction is the process of movement by a Friendly, non-Phasing unit in response to an Enemy Combat unit *moving adjacent to* that Friendly, non-Phasing combat unit. Reaction follows all the standard rules of movement, except as stated below.

[8.52] A given unit may React as many times as the Player wishes during an Operations Stage. A unit "reacting" expends CP's; however, it does *not* expend CP's for Breaking Contact/Engaged, as defined in 8.24.

[8.53] All units may react, with the following exceptions:

a. Non-motorized units, Squadron Ground Support Units, and Truck Convoys not stacked with Friendly combat units may *never* React.

b. No unit may React if the Enemy unit moving adjacent to it has a CPA *six or more* points greater than that of the non-Phasing unit *and* the owner of the Phasing unit announces there will be a Close Assault by his unit against the non-Phasing unit. Thus, a motorized infantry battalion may react when a tank battalion with a CPA of 25 moves adjacent to it, because a motorized unit will have a minimum CPA of 20 (from its trucks). However, if the same motorized battalion were to be moved adjacent to by an enemy Recce battalion, with a CPA of 45, the motorized battalion could *not* React. (It could still Retreat Before Assault, however; see Section 13.0). Furthermore, each units is treated individually; thus, Second Line Light Trucks stacked with (but not attached to) that motorized battalion could retreat (as they have an extended CPA of 40, only 5 less than 45).

c. If a non-phasing unit is already in an enemy Zone of Control (usually as a result of (b) above) it may *not* React. In this way, faster units "pin" slower units.

d. A unit that is in combat or Engaged may not react.

[8.54] Notwithstanding anything said in 8.53, no battalion size unit may ever pin a division and no company-size unit may ever pin a brigade or larger unit. The terms used here refer to size, and not specifically the unit type/designation. Size of unit may be determined by Stacking Points as well as the TOE. Thus a division may be but a skeleton force, as may other units. The problem should rarely occur, as most units are fairly easy to determine as to size and type, but if there is a question use your Common Sense (or flip a coin if that commodity is in short supply). See Section 9.2.

[8.55] Reacting units may *never* enter an Enemy Zone of Control during their Reaction Movement. Otherwise, Reaction is undertaken like normal movement, with no limit as to how far a unit may React/Move.

[8.56] A unit may react, within the restrictions listed in 8.53 above, even if it is attached to a parent formation. In this case, the CP is expended for detachment and the unit may then react. A brigade HQ may not be detached from a division unless all of the units at present attached to the brigade HQ are also detached. In addition, the

detachment of units may not be performed such that the parent unit is *now* "pinned" as a result of its becoming a shell and having Case 8.54 now apply. Attached trucks may be freely divided amongst the parent unit and its detaching and reacting units. Note that this rule does *not* permit a parent unit to detach low CPA units in order for the parent unit to now be able to react.

[8.6] BREAKING OFF

[8.61] Breaking Off is a function of Movement that occurs when a unit beings a Friendly Movement Segment in *Contact* or *Engaged* with an Enemy Combat unit. Contact and Engaged markers are provided to indicate such status. (There has been some discussion of this in 8.24; see also Case 15.81).

[8.62] Units are in *Contact* if they are in an Enemy Zone of Control at the beginning of a Movement Segment.

[8.63] Units are *Engaged* directly as a result of Close Assault; *Engaged* is a combat result. Engaged units do not necessarily have to be in Enemy Zones of Control.

[8.64] A unit in Contact or Engaged with an Enemy combat unit at the beginning of a Movement Segment *or* a Retreat Before Assault (not Reaction) may not move until it has paid a cost in CP's to break off such contact. In addition, First Line Trucks wishing to detach from an Engaged or Contacted parent unit must expend the necessary CP's to so detach. Second/Third Line Trucks wishing to *attach* as First Line Trucks to Engaged or Contacted units do not expend additional CP's to so attach.

[8.65] A unit in *Contact* must expend *two* CP's to Break Off before moving.

[8.66] A unit that is *Engaged* must expend *four* CP's to Break Off before moving.

[8.67] When all of the Friendly units that were in Contact or Engaged with an Enemy combat unit Break Off that Enemy unit is no longer Engaged or in Contact.

[8.68] Contact and Engaged markers affect only the combat units in the hex at the time of their placement. Units moving into a hex with a Contact or Engaged marker are not affected by that marker.

[8.7] RAIL MOVEMENT OF LAND UNITS

[8.71] There are two rail lines in the game. The Alexandria-Mersa Matruh line is an active railroad. It may be extended by construction (see Case 24.6) and may be used only by the Commonwealth Player, regardless of the strategic situation. The Soluch-Benghazi-Barce rail line is on the game-map solely for historical purposes; it may not be used for anything and has no effect whatsoever on terrain or movement. (It *was* used by the Italians in 1940, but not in any way as to affect the game.)

[8.72] The Commonwealth Player may use Rail Movement once per Operations Stage, in the Commonwealth Rail Movement Phase. He may transport units and/or supplies, and he may move one "stack" of these *any* distance along the rail line in each direction. Thus, a unit may be moved *west* from Alexandria to any rail hex along a finished rail line as far as (eventually) Tobruk, and supplies in Tobruk may be moved *east* to Matruh.

[8.73] To use Rail Movement a unit must start the Operations Stage on a rail hex, it may not have expended any CP's for any other reason during that Operations Stage, and it may not be in an Enemy ZOC. The unit is then moved to the desired point along the line where it stops. It may not enter an Enemy ZOC or Enemy-occupied hex at any time while using Rail Movement.

[8.74] The Commonwealth Player may use his railroad lines once in *each* direction. I.e., he may carry one unit (or stack) as far as he wishes in an easterly direction and another stack (or perhaps supplies) as far as he wishes in a westerly direction.

[8.75] The maximum number of Stacking Points that may be carried by Rail Movement is *two*. (Thus large Brigades must be broken down for Rail Movement). For supply maximums, see Section 49.3.

[8.76] Rail hexes that have been destroyed by bombing, etc. may not be entered by Rail Movement until they are repaired. Likewise, the rail hexes not yet in existence (8.47) can not be used until they have been constructed (see Case 24.6).

[8.77] Units may be picked up and dropped off *anywhere* along a rail line, as long as the Stacking and directional restrictions are always observed and no unit using rail has expended CP's in that Operational Stage.

[8.78] No Rail hex west of any rail hex occupied by an Axis combat unit may be used by the Allied Player for Railroad Movement.

[8.8] TRIPOLI AND TUNISIA

[8.81] The area around Tripoli and Tunisia, both important entry ports for Axis troops and supplies, are represented by a series of four large boxes and a number of smaller boxes on the western edge of game-map section A. Each large box represents a specific region, centered around the geographical name in the box: Tripolitania, Tripoli, Gabes, and Tunis. References to these boxes as a group are indicated by the term "Tripoli/Tunisia boxes." The smaller boxes are used to represent the location of units in transit between the Tripoli/Tunisia boxes.

[8.82] Only Axis units and Commonwealth airplanes may enter the Tripoli/Tunisia region. No Commonwealth land or sea unit may ever enter any of the boxes.

[8.83] Air movement to/from the area is performed as per the standard Air Rules, with the distances listed in the Air Distance Chart. Land movement among the Tripoli/Tunisia boxes and the boxes and the North Africa proper of the game map has been abstracted. The distance traveled is measured by the number of Operation Stages in which a land unit must expend its Capability Point Allowance in movement. Motorized units are required to consume fuel but are not required to check for breakdown during movement in, to and from this off-map region. A unit must expend exactly its Capability Point Allowance in each Operations Stage of movement in, to, or from the off-map region.

[8.84] The number of Operation Stages of movement required by a specific unit in order to traverse the distance between the various Tripoli/Tunisia boxes and the map depends upon it Capability Point Allowance. The movement "rates" for units in the off-map region is listed in the Off-Map Land Unit Movement Distance Chart (8.89). A unit being moved from one Tripoli/Tunisia box (or hex A 2802, see Case 8.85) to another that can traverse the distance in a single Operations Stage is simply placed in its new location and the required fuel is expended. If the unit cannot cover the distance in a single Operations Stage of movement, it is moved one In Transit box for each Operations State it is moved until the required number of Operations Stages of movement have been completed. Note that a unit In Transit is not required to be moved each Operation Stage and that such a unit may reverse its direction, returning to its original starting location.

[8.85] For a unit to be moved off the game map towards Tripolitania it must *start* that Operations Stage in hex A2802. A unit entering the game-map from the off-map region is simply placed in the Road hex closest to the Tripolitania box. If there are more than five Stacking Points that are to be brought onto the map, they may be strung out on the Road in consecutive hexes (road) from the Tripolitania box; e.g., 5 points in hex 2802, 5 points in 2803, and 3 points in 2804.

[8.86] Reinforcements and replacements arriving in Tunis or Tripoli may not be moved from that box during the Operations Stage of their arrival.

[8.87] There are no stacking restrictions and unlimited Water in the Tripoli/Tunisia boxes and the In Transit boxes. In addition, the Tripoli/Tunisia boxes are considered to contain air facilities, *non-transferrable* supplies and maintenance crews sufficient for every plane the Axis Player has.

[8.88] The Tripoli/Tunisia boxes are considered to be Supply Dumps of unlimited capacity. However, a truck or motorization point may not be moved in the Operations Stage in which it loads and/or unloads supplies.

[8.89] Off-Map Land Units Movement Distance Chart (see Charts and Tables)

[8.9] MOTORIZED UNITS/TRUCKS

[8.91] A motorized unit in *CNA* is one that always contains enough vehicles to transport the entire unit as a single entity. Motorized units include those comprised of mechanized (i.e., tracked) vehicles, trucks, and motorcycles. Motorized units are divided into those that are inherently motorized (whose transportation vehicles may not normally be removed) and those that are being transported by truck points assigned to that purpose.

[8.92] Non-motorized units (i.e., "leg" infantry and a few gun units, with the exception of the Meharisti Cavalry (camels), may be transformed into motorized units (and visa versa) by the addition/(subtraction) of sufficient Truck Points. When being transported by trucks, a non-motorized unit's CPA becomes that of the appropriate rating of the truck that is transporting it.

[8.93] Certain non-motorized infantry units are designated as being *historically* normally supplied with enough vehicles to motorize the entire unit. These infantry units are so indicated by a " + " symbol after their CPA on the Unit Characteristics Chart. These units' characteristics differ only slightly with respect to their historically non-motorized brothers (see Cases 19.9 and 32.54).

[8.94] A motorized unit maintains its CPA even if it is performing an action which is impossible while actually in a vehicle. **Examples:** A towed (inherently) motorized artillery unit Barraging, an infantry unit receiving defensive benefits from fortifications, a motorized infantry unit assaulting into a salt marsh hex.

[8.95] Truck Points may be used to transport TOE Strength Points or supplies. Truck Points represented by a counter (for example: all of the Truck Points attached to an infantry division which is represented on the game map by its HQ counter) are assigned transportation duties *individually*.

Example: An infantry Battalion of six TOE Strength Points with 10 light, 10 Medium and 10 Heavy Truck Points attached might assign 4 light, two medium and one heavy Truck Points to the infantry in order to completely motorize the unit (this is inefficient, but variations on this theme will inevitably occur). Note that Truck Points are never *required* to transport anything, they may move around empty.

[8.96] Truck Points may be attached to any unit in *CNA* bearing a historical designation. When attached they are represented by the unit's counter. However, trucks are automatically under the control of the highest (largest) ranking Parent Formation to which they are currently attached. **Example:** A Truck Point attached to a battalion which is subsequently attached to a brigade become the property of that brigade. It is not necessary to subdivide the trucks among the brigade's component units.

[8.97] Trucks may be attached to a unit bearing a historical designation only during the Organization Phase of an Operations Stage (unless during the Operations State that unit is attached to a Parent Unit). Trucks may be detached from such a unit only during the Organization Phase of an Operations Stage unless that unit is a Parent Unit and detaches any of its attached subsidiary units during a Movement and Combat Phase. In such a case *any* portion of the total number of attached trucks to that newly detached unit. No unit with a Cohesion Level of minus five or worse may detach trucks completely from a unit bearing a historical designation.

[8.98] During the owning Player's Player-Turn, trucks that are attached to units move with those units in the Movement and Combat Phase, and trucks that are not attached to units are moved in the Truck Convoy Phase. In either case, trucks may be permitted to move during the opposing Player's Player-Turn (Reaction, etc.) Trucks that are moved in the Truck Convoy Phase may not exceed their CPA. If forced to through involuntary movement, they are captured instead. Truck Points being moved in the Truck Convoy Phase may be moved in any order, group sub-division, stops and starts. The only restriction being that Truck Points beginning and ending in the same hex and following the same path of travel must be moved as a group. **Example:** Fifty Truck Points begin in C2510. They are moved as a group (not required) to C2515 at which point 20 are moved to C2520 where they end their movement for that Truck Convoy Phase. The 30 Truck Points left in C2515 may now be moved (and sub-divided further if you wish). Note that this differentiates them from units detached from Parent Units (see Case 19.44)

[8.99] A Truck marker may represent any of the unattached Truck Points in that hex at that point in time, unless all of those Truck Points are being used to transport Infantry Replacement Points. The marker may be used to represent any Replacement Points or repaired vehicles in that hex (i.e., may not place the marker if just Tank Replacement Points in the hex). As many markers may be placed as there are unattached Truck Points in that hex.

[9.0] STACKING

GENERAL RULE:

Stacking refers to the process of placing more than one unit in a hex. Each unit is worth a certain number of Stacking Points, generally as printed on the counter, and each hex, according to the type of terrain it encompasses, has a maximum number of points that may be in that hex.

[9.1] THE STACKING POINT SYSTEM

[9.11] Each unit (or counter) in the game has a Stacking Point value printed on the face of the unit. (See Sample Units, 4.22). E.g., the 1/8 Panzer Battalion has 1 Stacking Point.

[9.12] HQ units, whether Division, Brigade, or Regiment, have parenthesized Stacking Point

values. This means the Stacking Point value of that HQ is '0' when it has *no* combat units of any type attached; the printed number is its Stacking Point value when it represents the division or brigade as a combat unit. (See Unit Equivalents, 9.2).

[9.13] Stacking Points not only represent a given number of men but also, and more importantly, they represent organizational ability. Thus a full division has a Stacking Point value of '5', while, at the same time, it may include units whose total Stacking Point values are much greater than five. The divisional HQ supplies the necessary administrative and organizational functions that enables the division to exist — and fight — in a more cohesive state.

[9.14] Each hex, or rather each type of terrain, has a maximum number of Stacking Points which may be in that hex at the end of any Movement Segment. These limits are listed in Case 8.37.

[9.15] Informational markers and air units of all types do not have any Stacking Point value.

[9.16] There are three specific types of units that, on certain occasions, ignore Stacking restrictions:

a. Garrison units (those units with a "G" above their Stacking Point number) stack freely in the city/village to which they are assigned as a Garrison. E.g., the Italian Heavy Weapons battalion assigned as garrison to Fort Maddalenna would have '0' Stacking Points in that village but '1' point anywhere else.

b. Pure anti-aircraft units (those units with the identification symbol for AA/Flak) stack freely in Major Cities. In addition, one AA/Flak unit may stack freely with any air landing strip and three in any airfield.

a "0+" CPA that are not at present motorized (have trucks attached that are being used to transport them) have zero Stacking Points.

[9.2] UNIT EQUIVALENTS

[9.21] A *Division* is considered to represent all units assigned and attached to (not simply stacked with) the HQ unit for that division. Units *assigned* (19.1) to a division (see the TOE Sheets for the units) may not necessarily be part of that division at a given time; they may have been detached for duty elsewhere. Only those units with the Parent unit/HQ at a given time are considered to be part of that parent unit for Stacking purposes.

[9.22] The next lowest level of unit organization in *CNA* is the *Brigade Equivalent*. Now, because of the peculiarities of the individual countries involved, not all units which are called "brigades" *are* brigade equivalents. The Italians used a Regimental designation as their next lowest organizational level (see any Italian infantry division). Such a Regiment is considered to be a Brigade equivalent for game purposes. Furthermore, the British had a propensity for using the terms "brigade" and "regiment" for a whole host of lesser-sized units, usually battalions. (E.g., the 7th Rifle Brigade is really a battalion-sized infantry unit while the 7th Motor Brigade *is* a Brigade). Players should be guided through this maze *not* by the unit designation on the counter or the unit's name but rather through the printed Stacking Point value. This number, cross-referenced with Section 9.4, will reveal the organizatioinal level of the unit (for game purposes).

[9.23] The basic combat unit in the game is the infantry and tank battalion ("battalion equivalent"). As noted, some battalion-sized units (actual battalion equivalents) may be *called* "regiments" or some such. Check the Stacking Point value when in doubt.

[9.24] Regardless of its organizational designation, every artillery unit in the game, with the exception of certain scattered batteries, has a Stacking Point value of "1". (The rare Artillery HQ unit may have a larger Stacking Point value).

[9.25] There are a number of companies and batteries in the game with a Stacking Point value of "0", due to the miniscule number of men and combat impact those units had. Nevertheless, unless directly attached or assigned to a parent unit, no more than *five* such companies or batteries may ever be stacked in any one hex, in addition to whatever else is in that hex. Exception: there is no limit to the number of such units which may be placed in a Major City hex. Note: an HQ unit that has no combat units attached to it has a Stacking Point value of "0".

[9.26] A Division is considered a "shell" (see Case 3.1) when 50% or less of the total number of brigade-equivalents that may be assigned to it are attached to it. *E.g.*, if a division which may have a maximum of two brigades assigned currently has only one brigade attached to it (ignore any independent battalions or whatever), the division is considered a *shell*. A brigade is considered to be a shell if less than 2/3rds of the total number of battalions (combat units) that may be assigned to it are attached to it. Exception: a brigade to which a maximum of two battalions may be assigned is not considered a shell if two battalions are attached to it and at least one of them is not itself a shell. A battalion is considered to be a shell when less than 50% of its maximum TOE Strength Points are attached to it, unless it is an Artillery battalion (or regiment or whatever); an artillery unit must be less than 25% of TOE strength to be a shell.

[9.27] If a unit attached to a parent formation is a shell, it *does not count* as one of the pre-requisite lower level units necessary to allow the parent unit to qualify as a full-strength unit. For example, a division to which a maximum of three brigades may be assigned has three brigades attached to it, but two of the brigades are shells. The division itself is thus considered to be a shell.

[9.28] A unit that is a shell is reduced one level to the next lowest-level formation for purposes of Unit Differentiation on Close Assault (see Case 15.5) and for any rule where unit size is important. Thus, a division shell would be considered a brigade equivalent, a brigade shell a battalion equivalent, and a battalion shell a company equivalent.

[9.29] First line (attached) Trucks do not count in any way towards unit organizational size or for road space stacking limits. Furthermore, Truck Convoys (unattached, see Case 9.3) that are in a hex do not count against any stacking limits, *except* those concerning road space, for which they *do* count.

[9.3] THE EFFECTS OF STACKING

Stacking restrictions limit the number of units that can be in a hex at the end of a Friendly Movement Segment, as well as at the end of an Operations Stage. Stacking restrictions also affect the ability of motorized units to move through Friendly units on a Road or Track. Stacking restrictions also apply during involuntary retreats. The stacking limits for each type of terrain are listed on the Terrain Effects Chart (8.37).

[9.31] Units may never cease movement in a hex in violation of stacking restrictions (8.37).

[9.32] Units may always move *through* other friendly units, and stacking restrictions apply only at the instant all units have ceased movement. However, see 9.33 and 9.35.

[9.33] A motorized unit (tank, truck, artillery, motorcycle, etc.) using a Road or Track to facilitate movement may *not* exceed the *five* point Road or Track Stacking Limit by moving through a Friendly unit or units *on* that Track or Road. If a unit using a Road or Track would create such a situation it must "move around" the non-moving units, entering that hex without the Road or Track benefit. Note: some terrain is prohibited to motorized units and such units could not move off a road to "go around" in such terrain. A unit ending its movement in a hex that it entered along a Road or Track counts against the Road/Track Stacking limit for *any* other motorized unit(s) using that Road/Track. For this rule, Trucks in Convoy are treated separately. See Case 9.29. Note: Off-road markers are provided with the game. They may be used to indicate units moved into a road hex without using the Road Bonus, and therefore are not "on the road" for purposes of this Case.

[9.34] Players are not permitted to "break up" a unit in order to avoid exceeding the limits of 9.33; i.e., moving through an occupied Road/Track hex a sub-unit at a time and then recombining the sub-units into the original unit. (Players should note that 9.33 and 9.34 operate to prohibit certain units from crossing escarpments by tracks if *either* side of that escarpment is occupied by Friendly units that would block passage as per Case 9.33).

[9.35] Stacking restrictions *do* apply during involuntary Retreats (those retreats mandated by the Close Assault CRT). A unit or stack of units may not retreat through a hex involuntarily in violation of Stacking Restrictions. However, in involuntary retreats, a stack of units (or parent formation) *may* be split up and retreated into different hexes (not through the same hex, though). Any portion of a unit forced to retreat that cannot so retreat because of Stacking Restrictions is required to "Stand" and receive additional losses (see Case 15.82).

[9.4] UNIT BASIC STACKING POINT VALUES
(see separate sheet)
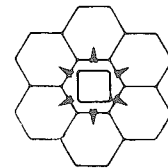
[10.0] ZONES OF CONTROL

GENERAL RULE:

The six hexagons immediately surrounding a hex constitute the Zone of Control (ZOC) of any unit in that hex. However, only certain types and sizes of units exert ZOC's. Hexes upon which a unit exerts a ZOC are called *controlled* hexes, and these inhibit movement of Enemy units. All units must cease movement upon entering an Enemy-controlled hex.

[10.1] WHICH UNITS EXERT A ZONE OF CONTROL

[10.11] All combat units above battalion-equivalent (i.e. with *more than one* Stacking Point) exert a Zone of Control. In addition, if there is *more than one* Stacking Point in a hex even if no larger-than-battalion unit is present, the units in that hex also exert a ZOC. Truck Convoys never exert a ZOC, nor do HQ units that have no attached combat units.

[10.12] Aircraft, Squadron Ground Support units, and warships exert no ZOC.

[10.13] Informational markers, such as dumps, minefields, airfields, etc., do not exert a ZOC.

[10.14] Units with a Cohesion Level of −26 or worse do not exert a ZOC.

[10.15] Regardless of 10.11, any unit(s) in a hex that total *less than ten Raw* Defensive Close

Assault Points do not exert a ZOC, whatever the organizational size of the unit. For this purpose, anti-tank units are always presumed to be Up Front (see Case 12.1).

[10.16] The non-Phasing Player must inform the Phasing Player whether or not a particular unit exerts a Zone of Control if that unit *could* exert a Zone into a hex *and* a unit belonging to the Phasing Player either begins a Movement Segment in that hex or is moved into that hex.

[10.2] EFFECTS OF ZONES OF CONTROL

[10.21] ZOC's extend into all hexes on the game-map, with the following exceptions:

a. ZOC's do not extend through All-Sea hexsides, Major River hexsides, or Lake hexsides; and

b. ZOC's do not extend through Escarpment hexsides; and

c. ZOC's do not extend into any adjacent hex into which the unit wishing to exert the ZOC could not enter from its present location. (Example: a Tank Battalion could not exert a ZOC into a Salt Marsh hex unless there was a Track or Road connecting the two hexes.)

[10.22] There is no cost in CP's to enter an Enemy ZOC. However, see Section 10.3.

[10.23] A unit must cease movement upon entering an Enemy-controlled hex. The moving unit may not exit that Enemy-controlled hex until the next Movement Segment (within that Operations Stage or in the *next* Operations Stage). If a unit begins a Movement Segment in an Enemy-controlled hex it *may* leave that ZOC, at a cost in CP's to Break Off (8.7). Units may not be retreated into a hex in an Enemy ZOC (exception: see Case 10.26).

[10.24] No units may be moved *directly* from one Enemy-controlled hex into another Enemy-controlled hex. However, terrain permitting, a unit may always "advance" into an *adjacent* hex vacated by an Enemy unit as a result of Combat, Retreat Before Assault, or Reaction. Such advance is taken as part of movement in the ensuing Movement Segment and costs CP's. (There is *no* literal Advance After Combat rule in *CNA;* this rule is simply an exception to the no-movement-into-Enemy-ZOC's rule).

[10.25] Friendly units *may* move through hexes adjacent to an Enemy combat unit that are not controlled by that Enemy unit's ZOC. (See Cases 10.1 and 10.21).

[10.26] For *all* movement purposes, the presence of a Friendly combat unit in a hex negates the effect of an Enemy ZOC. Friendly ZOC's never affect Friendly units.

[10.27] Opposing units exerting ZOC's on each other are considered to be in each other's ZOC. Furthermore, if opposing units exert a ZOC into the same hex that hex is considered to be controlled by both Players.

[10.28] There is no additional effect when more than one unit exerts a ZOC into a given hex.

[10.29] Truck Convoys may not enter an Enemy ZOC unless such hex is already occupied by a Friendly combat unit. Furthermore, no non-combat unit (i.e., bare HQ's, Engineers, Air Squadron Ground Support Units, etc.) may ever enter an unoccupied hex in an enemy ZOC voluntarily. If such a unit is alone in an Enemy ZOC at any time during the Enemy Movement/Combat Phase and it has no strength of any type, such Friendly non-combat unit is Captured.

[10.3] ZOC COMBAT REQUIREMENTS (HOLDING OFF)

[10.31] All hexes containing Enemy units exerting

Zones of Control on Friendly combat units must be attacked—either by Artillery Barrage or by Close Assault.

Note: A Probe (see Case 15.9) satisfies this requirement if the *basic* differential is −4 or better.

[10.32] As an exception to 10.31, if the *Friendly* units in such Enemy ZOC consist solely of Artillery, anti-tank, or anti-aircraft (or non-combat) units, or there *are* other type units but they are pinned (12.42), these units do not have to attack as in Case 10.31.

[10.33] Players may use a special "Holding Off" Artillery Barrage to satisfy the requirements of 10.31. (For experienced gamers, this is a sophisticated version of "Soaking Off".) Thus a Friendly Division that is in the ZOC of Enemy units from two different hexes may choose to Hold Off one of those hexes and Close Assault the other.

[10.34] To perform a Holding Off Barrage, a Friendly Player must Barrage an Enemy hex with at least as many *Actual* Barrage Strength Points (i.e., Barrage Rating × TOE Strength ÷ 10) as there are individual non-Gun (i.e., Artillery, Anti-Tank or AA units) Enemy battalion-equivalent combat units (units with *less than* 1 Stacking Point and Gun units do not count) in that hex. Remember, an Enemy Division may consist of, say, eleven battalion-equivalent units, so the Friendly Barraging Player would need 11 Actual Barrage Points to perform a Holding Off action against such a Division.

[10.35] If, according to the precepts of 10.34, a Friendly Phasing Player can not Hold Off Enemy units in a given hex he *must* Close Assault that hex. (Remember Case 10.32). There is no minimum point requirement for a Close Assault.

[10.36] If, for any reason, a unit can neither Assault nor Hold Off an Enemy unit, that Friendly unit must Retreat *three* hexes (playing all CP's for such movement) and earn *three* Disorganization Points, in addition to any garnered by the retreat. Such retreat must place the retreating unit three hexes distant from the Enemy unit (no doubling back, etc.) and may not be made through any hexes in Enemy Zones of Control. If forced to enter an Enemy ZOC the unit Surrenders in entirety.

[11.0] THE COMBAT SYSTEM

COMMENTARY:

CNA is an operational-level simulation, and it has been the history of operational games to have combat systems of a generally simple level (cf. *Panzergruppe Guderian, Battle of the Bulge,* even *War in Europe*). However, the combat system in *CNA* is a multi-layered sequence consisting of several steps, all of which have been designed to take into effect not only the characteristics of the individual types of weapons (small arms fire *vis a vis* indirect artillery fire, etc.) but also the uniqueness of desert warfare. This imparts a tactical flavor to combat without resort to actual play-outs of combat on a tactical level. *Much* has been abstracted (the major abstraction being artillery ranges), but there is still a wealth of information available as to relative strengths, compositions and capabilities of the different units. Above all, we have attempted to instill a "combined arms" imperative in the combat system, with the result that unit composition is as important as actual strength. The *CNA* combat system requires some mathematical dexterity, but most of all it requires a good sense of organization and planning. Most

Players will enter combat "blind," knowing little about the Enemy. Knowing what to hold back and where to assign guns and tanks is all important.

The Combat System may appear complex, but it is simply a matter of following the sequence and making the necessary calculations as you progress. This section should be referred to when undergoing combat, at least until the mechanics of the sequence are well within the grasp of the Players.

GENERAL RULE:

During each Combat Segment, combat is mandatory between opposing units in adjacent controlled hexes. There are four basic types of combat activity: Barrage, Retreat Before Assault (non-Phasing units only), Anti-Armor, and Close Assault (offensive for the Phasing Player's units and defensive for the non-Phasing Player's units). Prior to the resolution of each type of combat, the Phasing and non-Phasing Players secretly allocate units to perform one or more of these activities, as they choose. The relative ability of a unit to perform a combat activity is a function of its basic rating for that activity modified by its current TOE Strength Level (excepting Retreat Before Combat, which any unpinned units may perform). Each activity necessitates the expenditure of Capability Points.

This Section discusses combat in general terms, as well as showing how the combat ratings are used. Combat resolution for each type of activity is discussed specifically in Sections 12.0 (Barrage), 13.0 (Retreat Before Combat), 14.0 (Anti-Armor Fire), and 15.0 (Close Assault).

PROCEDURE:

Once all movement has ceased (*i.e.,* the Phasing Player's movement and the non-Phasing Player's reactions), combat may occur. During a Combat Segment, the Phasing Player *must* attack all Enemy-occupied hexes which have units exerting Zones of Control upon Friendly units (see Case 10.3). Any other Enemy units in hexes adjacent to Friendly units may be attacked subject to terrain restrictions on combat. After determining which units are undergoing combat, each Player decides which Gun-class units in hexes adjacent to Enemy units will be placed in a *Forward* position and which will be considered in a *Back* position (see Case 12.1). This is done "secretly," each Player simply noting on either the TOE sheets or some other piece of paper the appropriate positions of his guns. Gun units remain in their specified positions throughout that Combat Segment. Players now engage in Barrage. Each Player decides which of his units will Barrage which Enemy hexes (see Case 12.2), noting the targets secretly on a piece of paper. Any adjacent hex containing Enemy units may be barraged. Both Players now Barrage individually, hex by hex, but casualties and Pinned results are taken after *all* Barrages have been completed. Players should note here any Barrages undertaken as Holding Off actions to satisfy ZOC combat requirements (see Case 10.3).

The non-Phasing Player may now Retreat Before Assault with *any* of his units that were not Pinned during Barrage.

Both Players now (and secretly, again) assign their units (including forward Gun-class units) to Anti-Armor *and/or* Close Assault roles. Any unit with an Anti-Armor rating may be assigned to the former. An individual *unit* may be assigned to *both* Anti-Armor Assault and Close Assault. This is done by dividing the TOE Strength Points of that unit between both types of Assault. However, an individual TOE Strength Point may never be so divided. Players may also choose to withhold un-

pinned Armor or Gun-class units out of combat (for whatever reason they so desire; usually ammunition costs). The strengths of these units is not considered; see Cases 15.29 and 15.8.

Both sides now engage in Anti-Armor Fire, each side firing at the other's "armor". All results from Anti-Armor Fire are taken before proceeding to Close Assault. All Armor units assigned to Anti-Armor or Close Assault are subject to Anti-Armor Fire. Withheld armor units are not subject to such fire. Thus, tanks assigned to Close Assault roles may be destroyed during Anti-Armor Fire.

After assessing losses from Anti-Armor Fire the *Phasing* Player engages in Close Assault against the non-Phasing Player. Only units *assigned* to Close Assault are used to determine the Assault Differential (however, see Case 14.26). Remember to adjust Close Assault Strengths for losses incurred from Anti-Armor Fire. Players now take casualties from Close Assault, place "Engaged" markers as needed and conduct any Retreats mandated by the Close Assault CRT. This concludes the Combat Segment, and the Phasing Player may now release any reserves he wishes and proceeds back to his Movement Segment (if he so desires).

The above sequence is general. For a complete description of all activities, consult Sections 12.0 through 15.0

CASES:

[11.1] UNIT COMBAT CHARACTERISTICS

There are seven Land Unit Combat characteristics: *Barrage, Vulnerability, Anti-Armor, Armor Protection, Offensive Close Assault, Defensive Close Assault,* and *Anti-Aircraft.* (The individual OA Sheets carry all the information for each unit in the game; the unit counters do not carry this information.) Every Land unit has been given a Rating (or a Factor used to multiply by TOE Strength) of its capabilities and relative strength in each of these areas. (See Designer's Notes for a discussion of how these ratings were arrived at). These are described in Case 3.5.

[11.11] The *Barrage* Rating is the measure of a unit's ability to engage in long-range indirect fire. Only Artillery units possess a Barrage rating.

[11.12] The *Vulnerability* Rating is an abstraction of a Gun unit's susceptibility to Close Assault, or how far back from the front it can operate without being affected by direct fire. All Guns — i.e., Artillery and Anti-Tank units — possess Vulnerability Ratings.

[11.13] The *Anti-Armor* Rating is a measure of a unit's ability to engage in direct fire with and destroy opposing Armored units.

[11.14] *Armor Protection* is a measure of a unit's armor, its strength and thickness *vis a vis* opposing Anti-Armor Ratings. Units that have Armor Protection Ratings are usually limited to Tanks, Recce and Armored Car units, and Self-Propelled Artillery.

[11.15] The two *Close Assault* Ratings are a measure of a unit's ability to perform (Offensive Assault) and defend against (Defensive Assault) Close Assault combat.

[11.16] The *AA Rating* of a unit is its ability to shoot down planes. For the most part, only AA/Flak units have this rating, but it can be found on other units. E.g., some Tanks have AA/Flak capability, as do some HQ units.

[11.2] CAPABILITY POINT EXPENDITURES FOR COMBAT

[11.21] A *non-Phasing* unit expends *three* CP's if it undergoes an attack. Exception: see Case 11.27. This will occur under the following circumstances:

a. If it Barrages an Enemy (Phasing) unit; or
b. If it undergoes any form of Assault (Anti-Tank, Close) except Probe (2 CP's). This includes the situation where a unit Retreats Before Assault into a Friendly hex that is later assaulted.
c. If it undergoes a Holding Off Barrage (see Case 10.3).

[11.22] A *Phasing* unit expends *five* CP's to perform any form of attack, other than a Probe. It can never expend more than *five* CP's in a given Combat, although if it engages in a different (new) round of combat after completing the first round of combat it will (possibly) expend more CP's. The following is a list of circumstances under which a combat unit expends 5 CP's to attack:

1. It Barrages an Enemy unit; or
2. It engages in Anti-Armor or Close Assault.

[11.23] A *Phasing* unit expends fewer than 5 CP's under the following circumstances:

1. It Probes an Enemy unit (2 CP's), or
2. It undergoes Barrage (3 CP's).

[11.24] A *non-Phasing* unit never expends *more* than *three* CP's in combat in a given Combat Segment, regardless of what happens to it in *that* Segment. A Phasing unit never expends more than *five* CP's in a given Combat Segment. See Case 11.27.

[11.25] CP expenditures apply to *all* units in a hex, even if certain units did not participate in combat in any way. This applies to Phasing and non-Phasing units. Thus, if the Commonwealth Player Close Assaults with his entire 7th Armored Division, but chooses to withhold the 1st KRRC, the entire division expends five CP's, including the non-participating 1st KRRC. Concurrently, if the Artillery units of the 7th Armored Division had barraged Enemy units and then the 7th Armored did nothing else, the entire division (if it were all in the same hex) would still expend 5 CP's.

[11.26] Generally, Phasing units will expend 5 CP's and non-Phasing units 3 CP's in a given combat Segment, except where a Phasing unit chooses to Probe. However, remember, if units in the hex with the Probing units Barrage the Enemy units those units expend 5 CP's, regardless of the Probe attempt.

[11.27] A unit defending against a full (non-Probe) Close Assault in which the final Assault Differential is *minus four* or worse expends only *one* CP to defend.

[11.3] CALCULATION OF COMBAT STRENGTHS

The Combat Strengths of a unit for a given function (Assault, Anti-Tank, etc.) are stated in *Actual Strength Points,* which are arrived at by multiplying the TOE Strength by the Combat Rating for that particular function and then dividing this Raw Strength by *ten* (except for A.A.). This does not apply to a unit's Armor Protection or Vulnerability Ratings, which remain constant and are applied and used differently.

[11.31] The relative strength value of units during combat (with some exceptions noted below) is expressed in *Actual* Stength Points. These Actual Points are either applied directly to a hex or unit (as in Barrage or Anti-Armor) or compared with the Enemy forces (as in Close Assault or Probe). Case 12.54 is a minor exception to this rule.

[11.32] The formula for arriving at the Actual Strength of a unit is as follows: *Combat Rating ×* *TOE Strength used + 10 = Actual Strength Points.* Players should round any decimals to the nearest whole number: 11.4 = 11, 11.5 = 12.

[11.33] A unit that has less than .5 Actual Points (or, to state it differently, has only four or less Raw Points) has an Actual Strength of zero (0).

However, if *both* sides of a Close Assault or Probe have less than *ten* Raw Points Players should use the Raw Points as if they were Actual Points. See also Case 15.51. Raw Points are the numbers arrived at by multiplying the Combat Rating by the TOE Strength.

[11.34] All Raw Points are totaled before dividing by 10 for Actual Strength. This applies for units within a hex as well as units attacking from different hexes (against the same target).

[11.35] As an example, we will demonstrate how to determine a variety of combat strengths for an entire Division, using the German 90th Leichte Division as an example (see the OA Sheets for this unit). We will assume the unit is at full strength and that all units assigned are currently attached to the division and that there are no other units attached.

The Axis Player wishes to use the Artillery in the 90th to Barrage the enemy; it has the 361 Artillery Battalion and the 190th Artillery Rgt. to do this. The 361 has 3 TOE points of 9-rating Barrage, or 27 Raw Points. The 190 has 3 TOE of 18 Rating Barrage plus 3 TOE points of 9-Rating Barrage, for a total of 81 Raw points (27 + 54 = 81). Thus a combined total of 108 Raw Barrage Points is available, which equals 11 Actual Barrage Points (108 ÷ 10 = 10.8, rounded up to 11). The 90th may now Barrage with those 11 Actual Points against the enemy. The Axis Player could also split up its TOE Strength if he wishes, using 2 TOE points of the 361st (or 2 Actual Points) against one unit and the other TOE point against a different unit. There are restrictions involved, and the Section on Barrage (12.0) covers them all.

Skipping to Close Assault — for demonstration purposes — we see that the 90th Leichte has seven Infantry Battalions: the entire 155th Schutzen Regt. (3 battalions), the two battalions of the 361st Afrika Regt plus the III/225 and the III/347 Battalions. The 155th provides 42 Raw Points, the 361st provides 9 Raw Points (it would provide 18 on defense) and the two odd battalions an additional 14, for a grand total of 65 Raw Offensive Close Assault Points (excluding any Artillery firing in Assault), or 7 Actual Points (6.5 rounded up). As above, these points could be split, by dividing the TOE points, or assigning different battalions to assault different hexes, etc. Each separate Close Assault is determined individually.

[11.36] It will behoove the Players to keep a running track of all Raw and Actual Point totals for his Parent organizations on his TOE Sheets, so he knows at a glance what is available and what his strengths are. These strengths are to be kept secret from opposing Players, revealed only upon attack.

[11.37] AA/Flak Actual Points are calculated the same as other strengths, with one major difference. As with anti-armor, close assault, and barrage calculations, multiply the TOE Strength by the AA Rating. But *do not* divide by ten; the raw AA Points *are* the Actual AA Points. Thus, an AA unit with a rating of 4 and a strength of 2 would have 8 AA Points.

[11.38] The only combat ratings that do not use the above formula (multiplying by TOE Strength, etc.) are the Vulnerability and Armor Protection ratings. These ratings are used to determine the number of gun and armor losses and are discussed in Cases 14.42 and 15.85.

[12.0] BARRAGE (Artillery Combat)

GENERAL RULE:

Barrage is the first "step" of the Combat Segment. Any combat or HQ unit with a Barrage

Rating (and enough ammunition) may Barrage enemy units in adjacent hexes. Each Player simply determines how many Actual Barrage Points he has, selects his targets, and fires his guns at the selected targets, subtracting ammunition as used. At the beginning of the Combat Segment, all Artillery units are placed in either of two positions: Forward or Back. The position of a gun unit dictates whether it may coordinate fire with other artillery units and whether it may split its fire to Barrage more than one target.

PROCEDURE:

After all Targets have been designated and Barrage Points assigned to those Targets (see Case 12.23), Barrage is resolved. The effects of Barrage are simultaneous, in that all results are applied after all Barrages are completed, but each individual Target is barraged separately, in any order the Players desire. To resolve a Barrage, the Barraging Player states his Target (either by type or number, as explained in Case 12.24, or by specific unit I.D., if he has that information), states the number of Actual Barrage Points (see Case 11.32) directed at that Target and then consults the Barrage Results Table (12.6), selecting the appropriate column depending on the type of unit being fired at (Gun, Armor, or Infantry). He then rolls two dice, combining the results such that the larger die's result is stated first and the small die's second (e.g., a "2"/"5" is considered a "25"). The result is cross referenced with the Target type and the Actual Barrage Points expended. The Player then repeats the process to determine whether any trucks in the hex are affected. Results are noted, and applied at the end of the Barrage Step. The firing Player also subtracts ammunition expended as his guns are fired.

Note: "Holding-off" Barrages are resolved in the same fashion as normal Barrage (see Case 10.3).

[12.1] ARTILLERY POSITIONS

[12.11] Artillery units, when they are involved in combat, must be placed either Forward or Back. The entire unit, regardless of its size (or whether, as in some artillery units, it has more than one type of gun) must be placed in the same position.

[12.12] The position of an artillery unit may not be changed during a Combat Segment; it may be changed only at the beginning of a Combat Segment, when the Players must decide their gun positions.(See the Sequence of Play.) Positions of guns may be noted on the TOE Sheets or on any handy piece of paper.

[12.13] Artillery units in a Forward position may coordinate fire with other artillery units (in a Forward position) from the same or different hexes. i.e., they may combine its Barrage Strength with that of other units directed at a given target.

[12.14] Italian units in a Forward position may co-ordinate Barrage fire only with units within the same hex.

[12.15] Artillery units in a Forward position may split their TOE Strength and attack more than one target, directing a portion of its TOE Strength against one unit and another portion against a different unit (target).

[12.16] Artillery units in a Back position may not coordinate fire with any other artillery unit nor may they split fire. If a Heavy Weapons unit has Barrage capability and its guns are back, the entire unit is considered back and thus cannot participate in anti-armor or Close Assault combat.

[12.17] All non-Phasing Players' Guns in a Forward position are subject to losses from Close Assault, even if they do not participate in such an assault. See Section 15.8 for details on losses. All non-Phasing (Forward or Back) are subject to Close Assault losses if the Close Assault by the Phasing Player is conducted in the Overrun Columns of the Close Assault CRT (see Case 15.84).

[12.18] Artillery placed in a Forward position may participate in Anti-Tank or Close Assault in that same Combat Segment, providing they have the necessary Ratings and Ammunition. However, Artillery participating in an Offensive Close Assault has its Vulnerability rating reduced by 50% (½) rounded up. Thus a unit with a 7 Vulnerability Rating would have a 4 Vulnerability Rating if it chose to participate in Offensive Close Assault. Note: the higher a unit's Vulnerability Rating, the less vulnerable it is.

[12.19] Artillery units used in an Anti-Armor (14.0) role must assume an automatic Vulnerability Rating of '2'.

[12.2] TARGET SELECTION

[12.21] Target Selection involves the principle that a Parent Formation is comprised of one or more battalion- (or company-) sized units. Thus, the 90th Leichte Division (German) is composed of thirteen battalion-sized combat units.

[12.22] For Barrage purposes, all (with the following exceptions) counters, whether attached or not, in a hex that bear a Stacking Point indicator are targets. This includes engineer units but excludes Trucks, SGSU's, etc. The exception is all HQ's without TOE Strength Points or with only points with parenthesized Close Assault Ratings. In addition, Dummy Tank formations (see Case 16.4) and Commonwealth warships may be considered targets.

[12.23] Barrage is directed at a specific target combat unit (as defined in 12.22). The Barraging Player states which hexes he wishes to Barrage from. The opposing Player then states how many targets (individual battalions/companies) are in each hex adjacent to a hex which is firing. He also states whether each Target is a Gun class, Armor Class, or Infantry Class unit—see Case 3.2. He does not have to state the strength, exact type or designation of any unit. However, if a Player knows that a specific unit is in a hex under Barrage (through Patrol or previous combat) he may designate that specific unit as a target.

[12.24] Except as stated in the last sentence of 12.23 the Barraging Player fires "blind", stating only that he is firing at a given type of unit as target. For purposes of resolving Barrage, Players should assign, for a Barrage Step, ID numbers to each type of unit. E.g., Infantry #1, Infantry #2, etc. Thus, the Barraging Player states he is directing "X" number of Actual Barrage Points against Target Infantry #2.

[12.3] EFFECTS OF TERRAIN AND OTHER RESTRICTIONS ON BARRAGE

[12.31] Artillery units may Barrage Enemy targets in any adjacent hex, regardless of terrain. Artillery units may not Barrage non-occupied hexes (however, see Case 12.5).

[12.32] No target may be barraged more than once in a Combat Segment from each adjacent enemy occupied hex. Of course, Artillery units in a Forward position may combine Barrage strengths in one Barrage against a given Target.

[12.33] Certain terrain affects artillery fire in that if a Target unit is in that terrain the Column (Barrage Points) used to resolve Barrage for that unit is shifted a specific number of rows "left," benefitting the defender. Thus, if a towed artillery unit were being Barraged as a target in a Level Two Fortified position (Clear Terrain) by twelve Barrage Points (the 11-12 column on the Barrage CRT) the Barrage would be resolved on the 7-8 column, because a Level Two Fortification benefits the defender two column shifts.

[12.34] Column shifts — and terrain benefits — are not cumulative. The defender gets the benefit of only the best defensive position or terrain. See the Terrain Effects Chart for all terrain benefits and column shifts. Remember, column shifts always benefit the defender. Shifts worse than 1-2 column mean the Barrage had no effect.

[12.35] There are no Line of Sight restrictions in CNA regarding Artillery. Artillery units may Barrage any unit to which they are adjacent.

[12.4] EXPLANATION OF ARTILLERY BARRAGE RESULTS

[12.41] The Artillery Barrage Table (12.6) is a CRT that covers artillery fire against personnel, Armor, Artillery and concurrent effects on Trucks. Regardless of the target (see Case 12.5) the Player will use the Artillery Barrage Table for his results.

[12.42] The Artillery Barrage Table uses a two-dice sequential read-out; i.e., a '3' and a '4' are 34, reading the target die first. These die rolls comprise the columns of the Table, while the total Barrage Points applied to the Target comprise the rows of the table. The "meat" of the table — the center portion — is the results, divided according to target type.

[12.43] The Player notes the number of Barrage Points being fired, adjusts the column left if necessary and rolls the two dice. He then cross-references those two numbers under the correct target type (personnel, tanks, or artillery) and obtains the result.

[12.44] If a result of "P" is obtained, the entire target unit is "Pinned". Pinned units may not move for the remainder of that Combat Segment, nor may they engage in Anti-Armor Fire or Close Assault. Pinned units are subject to casualties(see Case 15.12). Place a Pinned marker on all Pinned units; remove the marker at the end of the Combat Segment. "Pin" results from Barrage do not occur againstGun-class units or Artillery HQ units.

[12.45] A number as a result (e.g., 1 or 2) indicates the number of TOE Strength Points are destroyed by the Barrage. Casualties are taken after all Barrages are completed.

[12.46] Trucks may be affected by Artillery Fire. Every time a Player fires at a given target, be it Infantry, Armor or whatever, he must roll a second time to determine whether any Trucks attached to the Target unit and/or its parent unit (if any) are affected. Thus, if a Player has 10 Barrage Points firing at Infantry he rolls once for the effect on the target and if , and there are any Trucks in the same hex as the unit being barraged then the Barraging Player rolls again on the 10 point row under Trucks to see how many, if any Trucks were destroyed. The choice of Trucks to be removed is up to the Defender, but losses must be distributed as evenly as possible among types of trucks and types of cargo. Players should note that when barraging Infantry, if those TOE points are already in Trucks (motorized) those Trucks are also eliminated, in addition to any Trucks actually noted on the Artillery Barrage Table.

[12.5] BARRAGE AGAINST FACILITIES

[12.51] Artillery may be used to Barrage facilities, rather than actual units, in an effort to reduce their effectiveness. Such Barrage may be directed against Major Cities, Fortifications, Roads, Railroads, Supply Dumps, and Air Facilities.

[12.52] Barrage against Facilities follows all the rules of normal Barrage, with the exception that the Target designated is the specific facility.

[12.53] In barrages directed against any Facility other than a Supply Dump or Air Facility the Players use Air Bombardment Table (41.5), with the exception that they refer to the Artillery Barrage Points column in determining the effect of the Barrage. See Case 41.3.

[12.54] In Barrages directed against Supply Dumps or Air Facilities the Player uses Air Bombardment Table (41.5); however, he uses his *Raw* Barrage Points (not Actual) to correspond to the Bombload column. Thus 78 Raw Barrage Points would use the 41-80 column. Remember, do *not* use Actual Strength Barrage Points; use Raw Strength.

[12.55] Off-Shore Bombardment may be used to Barrage facilities; see Case 30.12.

[12.6] ARTILLERY BARRAGE TABLE

(See Charts and Tables)

[13.0] RETREAT BEFORE ASSAULT

GENERAL RULE:

Retreat Before Assault takes place after all Barrages have been completed. Any non-Phasing units that are not Pinned may Retreat Before Assault in the step designated for such movement. Retreat Before Assault is movement and consumes CP's; it should not be confused with Reaction (8.5).

[13.1] WHICH UNITS MAY RETREAT BEFORE ASSAULT

Any *non-Phasing* Unit that is not Pinned may Retreat Before Assault. Units with a Cohesion Level of −26 or worse may *not* Retreat Before Assault.

[13.2] HOW TO OF RETREAT BEFORE ASSAULT

[13.21] Retreat Before Assault is Voluntary Movement and is handled exactly as other types of Movement. It expends CP's (and Fuel, .for vehicles), and vehicles are subject to Breakdown. In addition, there are certain other restrictions, as listed below.

[13.22] Non-Phasing units in the Zone of Control of an Enemy unit must pay the cost to Break Off (Contact or Engaged) as stated in Case 8.6.

[13.23] Non-Phasing units that begin a Retreat Before Assault Step *adjacent to* an Enemy combat unit may expend as many CP's in Retreating as desired.

[13.24] Non-Phasing units that do *not* begin a Retreat Before Assault Step adjacent to an Enemy combat unit may not expend more than *four* CP's (or move one hex, whichever is greater) in a Retreat Before Assault.

[13.25] During a Retreat Before Assault units may expend CP's only to move; they may not perform any other function except blowing supply dumps (see Cases 54.14 and 32.3).

[13.26] As in normal Movement, units must cease Retreat Before Assault when they enter an Enemy Zone of Control. They may not Retreat directly from one Enemy ZOC into another, and if they cannot avoid this restriction they may not Retreat Before Assault.

[13.27] Retreat Before Assault is voluntary; as such it is handled somewhat differently from retreats mandated by the Close Assault CRT (Case 15.82).

[13.28] Units that Retreat Before Assault into Friendly-occupied Enemy-controlled hexes, or into any hex that is attacked in the ensuing Anti-Armor and Close Assault sub-segments *are* affected by such combat. They will take — and are susceptible to — Anti-Armor Fire, but they may not direct Anti-Armor fire against Enemy units. They may *not* add their Offensive or Defensive Close Assault Ratings into the Assault combat in that hex, *but* their TOE Strength Points *are* included when taking percentage losses from that Assault.

[14.0] ANTI-ARMOR COMBAT

GENERAL RULE:

Anti-Armor Combat is fire by units with an Anti-Armor Rating directed against Enemy units with an Armor Protection Rating. Anti-Armor Combat occurs before Close Assault, and all losses from Anti-Armor are taken before proceeding to Close Assault, irrespective of what type of combat the armored unit has been assigned to. Units may be assigned to either Anti-Armor *or* Close Assault; or Players may split the TOE Strength Points within a unit and assign some to one and some to another — but never to both in the same Combat Segment. The Player then determines the Actual Anti-Armor Strength Points firing at a hex, he consults the Anti-Armor CRT and based on the number of Damage Points earned *vis a vis* the Armor Protection Rating of the Enemy units. Units specifically withheld from both Anti-Armor and Close Assault are not affected by Anti-Armor fire.

PROCEDURE:

During the Anti-Armor Combat Step, *both* Players engage in Anti-Armor fire, regardless of which Player is the Phasing Player. All Anti-Armor fire is simultaneous (*i.e.*, all results are applied after all attacks have been resolved).
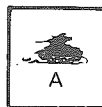
Anti-Armor fire is directed against a specific hex designated by the Phasing Player and affects only those units in that hex that have an Armor Protection Rating (see Case 14.23) which have not been withheld. Each Player totals his Actual Anti-Armor Strength Points firing in that hex (see Case 11.32), rolls two dice, and consults the Anti-Armor Combat Results Table (14.6) to see how many Damage Points he has inflicted. These points are then applied by the owning (fired upon, so to speak) Player to remove (eliminate) TOE Points with Armor Protection Ratings in that hex (see Case 14.4, Assessing Anti-Armor Damage), and a Destroyed Tank marker is placed in the hex.

Each Anti-Armor attack is performed separately in any order the Players wish, as all results are only applied after all fire is complete.

[14.1] WHICH UNITS MAY PARTICIPATE IN ANTI-ARMOR COMBAT

[14.11] Anti-Armor Combat pits units with Anti-Armor Ratings firing against targets that have Armor Protection Ratings. Only units assigned to the Anti-Armor Sub-Segment of the Combat Segment may fire their Anti-Armor Points, and only those units actually committed to Anti-Armor *or* Close Assault are affected by such fire (see Case 14.12). Units with Armor Protection Ratings withheld from combat are *not* affected by Anti-Armor fire.

[14.12] Anti-Armor fire by the Phasing Player is directed at an entire *adjacent* hex (not specific target units) occupied by Enemy units. Anti-armor fire by the non-Phasing Player is directed against any Phasing Armor Class units assaulting the hex. Units that are in a hex at which Anti-Armor fire is directed that have Retreated Before Assault *are* affected by Anti-Armor fire (although they may not use Anti-Armor fire against Enemy units) and they may not be withheld from the effects of Anti-Armor fire.

[14.13] *Any* artillery unit with an Anti-Armor Rating that is in a *Back* position (see Case 12.1) may not participate in (nor is it affected by) Anti-Armor fire. Anti-Armor guns are always *Forward* when firing.

[14.14] Artillery units used in an Anti-Armor role have an *automatic* Vulnerability Rating of 2.

[14.2] RESTRICTIONS ON ANTI-ARMOR COMBAT

[14.21] Units withheld from both Anti-Armor and Assault Combat are not affected by Anti-Armor fire (although defending units withheld *may* be affected by Close Assault).

[14.22] No hex may be attacked by Anti-Armor fire more than once in a Combat Segment, but units from different hexes may direct Anti-Armor fire into the same Target hex, combining their Anti-Armor Strength into one total strength.

[14.23] The Player directing the fire may not know whether the opposing Player actually has any armor in a hex; that is his problem to determine. If the "defending" Player has *no* units with Armor Protection Ratings in a hex being fired on by Anti-Armor the "attacking/firing" Player may reassign up to ½ (rounded *down*) of those Anti-Armor points to Close Assault for that Combat Segment. Only when there are *no* defending Armor units in a Target hex may this occur.

[14.24] Ammunition for Anti-Armor fire is removed as expended.

[14.25] Certain terrain influences the effectiveness of Anti-Armor fire, and these effects are noted on the Terrain Effects Chart (see Case 8.37) and in Case 14.3. All column adjustments are made before firing.

[14.26] Remember, a Player may divide a unit's TOE Strength Points between Anti-Armor or Assault, but he may not use a given TOE Strength Point for both in the same Segment.

[14.3] TERRAIN EFFECTS ON ANTI-ARMOR FIRE

[14.31] Certain types of terrain influence the effectiveness of Anti-Armor fire, while certain types of hexsides render Anti-Armor fire impossible.

[14.32] Where the defending armor is in a hex where there is a Terrain Effect, there is a Column Shift in favor of the Defender; i.e., it lessens the Anti-Armor firepower of the Attacker. All such effects are listed on the Terrain Effects Chart (Case 8.37). E.g., if units in a Rough Terrain hex are fired on by Anti-Armor Fire worth *nine* Actual Anti-Armor Strength Points the combat is resolved in the *eight* column of the Anti-Armor CRT because of the one column shift.

[14.33] The effects of terrain (including fortifications) are not cumulative; the defending Player must choose the best terrain. However, the effects of terrain *across a* hexside are in addition to those *within* the hex.

[14.34] *No* Anti-Armor fire may be directed from or against Phasing TOE Strength Points assaulting through *Ridges* that are not crossed by tracks or roads, or *down* a Slope hexside uncrossed by a

Road or Track, or *down* an Escarpment uncrossed by a Track.

[14.35] If a terrain effect shifts the Anti-Armor Strength Point Row *lower than* '1', use the "0" row.

[14.4] ASSESSING ANTI-ARMOR DAMAGE

[14.41] All results on the Anti-Armor CRT (see Case 14.6) are in Damage Points. Damage Points are applied to the Armor Protection Ratings of any Armor TOE Strength Points in the hex being fired upon.

[14.42] The Armor Protection Rating is the number of Damage Points that Point can absorb before it is destroyed. All units comprising Points with an Armor Protection Rating may be affected by anti-tank fire and thus take losses because of it.

[14.43] The Player undergoing Anti-Armor fire must remove *at least* as many TOE Strength Points as are affected by absorbing Damage Points. Thus, armor units with higher Armor Protection Ratings can absorb more Damage Points and are thus harder to destroy.

Example: The Commonwealth Player fires *five* Actual Anti-Armor Strength Points into a hex containing *six* TOE Points of Italian M/11's and *three* TOE Points of M/13's. The Commonwealth Player rolls a 35 on the dice and earns seven Damage Points. The Axis Player must remove enough TOE Strength Points to absorb at least seven Damage Points. He therefore destroys one TOE point of M/13 (3 Armor Protection Rating) and two M/11's, (2 Armor Protection times 2 = 4) to cover the necessary seven point absorbtion.

[14.44] Armor losses may be taken from any units with an Armor Protection Rating in the target hex, regardless of whether they were assigned to Anti-Armor or Close Assault. However, Armor units withheld from both types of combat are not affected by Anti-Armor Fire (see Case 13.28).

[14.45] Damage Points in excess of those necessary to destroy *all* armor units in a hex are ignored.

[14.46] Destroyed Tanks are noted with *Destroyed Tank Markers,* which cannot move but may be retrieved during the Repair Segment. Players should record precisely what each Destroyed Tank marker represents (see Case 14.5).

[14.47] Self-propelled guns may absorb anti-armor Damage Points at a rate equal to their Armor Protection Rating *plus* their Vulnerability Rating (modified if necessary if the point is engaging in anti-armor fire, etc.)

[14.48] If the owning Player's only TOE Strength Points in the hex (assaulting or defending against assault) that could be affected by anti-armor fire are halftracks (i.e., certain *motorized* axis leg infantry units), the halftracks double their Armor Protection Rating. Note that losses of halftracks involve not only the infantry TOE Strength Point but its transporting Truck Point(s) as well.

[14.5] CAPTURING ENEMY DESTROYED TANKS

[14.51] Friendly Players may capture (and repair) Enemy Tank Units (only destroyed *tanks* may be captured; all other destroyed vehicles are removed immediately).

[14.52] If an Enemy Player enters a hex containing a Destroyed Tank Marker, and there are no other Friendly combat units in that hex, the Enemy must decide immediately whether to permanently eliminate the Points or thenceforth consider them captured.

[14.53] Captured Destroyed Tanks may be moved three hexes in any direction by the capturing Player at the instant of capture. The three hexes may not include Enemy units or Enemy ZOC's; nor may they include impassable terrain.

[14.54] Except for 14.53, Destroyed Tanks are treated like any other unit marked for possible Repair. In the Phasing Player's Repair Phase they may be towed to a Repair Facility for Maintenance.

[14.55] Players should note that there is a subtle difference between capturing Destroyed Tanks and capturing Broken down Vehicles. Consult Section 21.5 for a discussion of this.

[14.6] ANTI-ARMOR COMBAT RESULTS TABLE
(see Charts and Tables)

[15.0] CLOSE ASSAULT

GENERAL RULE:

Close Assault is the last step of the Combat procedure. In Close Assault, the Phasing Player is the attacker and the non-Phasing Player is the defender. The Phasing Player may assault any adjacent Enemy-occupied hex, within the terrain restrictions for Close Assault. Close Assault resolution involves an Assault Differential, in which the Close Assault Points of the Defender are subtracted from those of the Attacker; results are expressed in Casualties (either losses or prisoners) plus Engaged and Retreat results. The Assault Differential may be modified by terrain, morale, and the effects of Combined Arms. Close Assault expends ammunition for both sides. A form of modified Close Assault — the Probe — is discussed in Case 15.9. In Close Assault, the Phasing Player is always attacking (or assaulting), the non-Phasing Player is defending against the assault.

PROCEDURE:

Each Player totals his Actual Close Assault Points (either Offensive or Defensive, depending on whether he is Phasing or non-Phasing) involved in each separate Close Assault. The non-Phasing (defending) Player then subtracts his Actual Close Assault Points from the Offensive Actual Close Assault Points of the Phasing (attacking) Player, obtaining an Assault Differential (a positive or negative number, or a zero). This Diffrential is then modified by any terrain effects, morale considerations, and/or difference in unit organizational size between opposing forces. The Phasing Player then consults the Adjusted Assault Differential and rolls two dice, reading the dice sequentially: the large die is read first, then the small die so that a large die roll of 6 and a small die roll of 3 is 63. The non-Phasing Player does the same, and both consult the Close Assault Combat Results Table to determine what losses, if any, have occurred. Such losses, as well as any other results, are taken immediately before proceeding to the next hex's Close Assault.

CASES:

[15.1] WHICH UNITS MAY PARTICIPATE IN CLOSE ASSAULT

[15.11] All units which possess a Close Assault

Rating may use their ratings to aid in either Offensive Assault or Defense Against Assault. (Units without Ratings may also participate, even though they add nothing to the point total; see Case 15.17.)

[15.12] Pinned units and units retreated before assault into a hex under Close Assault attack may *not* add their Ratings to Defensive Close Assault. However, the TOE strengths of sucvh *defending* units are considered for purposes of determining casualties *vis a vis* the number of TOE Strength Points in a hex, a percentage of which will be eliminated. This pertains *only* to *non-Phasing* defending units.

[15.13] Guns that are *Back* are not affected by Close Assault unless there is an Overrun situation (see Case 15.86). Guns that are Forward may participate in Offensive or Defensive Close Assault, but their Vulnerability Ratings may be affected (see Case 12.18).

[15.14] Only those units committed to Close Assault (either Offense or Defense) may add their Ratings to the total Assault Ratings. However, certain non-Phasing units may be affected by results even though they do not participate (see Cases 15.12, and 15.15).

[15.15] Units that are out of ammunition may not Close Assault, either offensively or defensively. However, as in Case 15.12, such units are considered when determining percentage losses if they are non-Phasing defending units. *Phasing* units that are out of ammunition are simply ignored. If *all* non-Phasing, defending units in a hex are out of ammunition for Close Assault purposes, and such units *are* Assaulted, they automatically Surrender *en masse* (i.e., every unit in the hex Surrenders).

[15.16] A given Phasing unit may split its TOE Strength Points and make one Close Assault with some Points and another with the rest, or simply withhold a portion from any Offensive Close Assault. A non-Phasing Player may withhold individual TOE Strength Points, too, but, unlike Phasing units, these Points are considered in determining percentage losses. Note: The same hex may never be Close Assaulted more than once per Combat Segment.

[15.17] Units with Close Assault Ratings in parentheses may use those ratings in combat only if they occupy a hex that is unoccupied by combat units. Such units do not include their TOE Strength for determining losses when they occupy a hex with combat units *unless* the "losing" Player so wishes. In such a case, units with parenthesized ratings may be used to absorb losses but may not absorb more than 25% of such losses. Note that if a Phasing unit Close Assaults two hexes in the same Close Assault at the same time, and one of the hexes contains solely a unit with parenthesized Defensive Close Assault Rating, that defending unit *may* use its parenthesized rating in that combat.

[15.18] In a Close Assault involving only non-Phasing units with only parenthesized Close Assault Ratings, if the attacking force has a Raw Offensive Close Assault strength at least three times the defending parenthesized units' Raw Defensive Close Assault strength the following two effects apply:

- The attacking (Enemy) force ignores the first 20% losses it receives from the Close Assault; and;
- If the defending parenthesized units receive a Close Assault result of Casualties of 20% or greater, any TOE Strength Points remaining after losses are assessed are captured (if the Enemy forces survive).

Thus, an AA/Flak unit, for example, may be able

to hold off a small Enemy detachment, but it will most likely be overrun by anything larger.

[15.2] HOW CLOSE ASSAULT OCCURS

[15.21] Phasing units with Offensive Close Assault Ratings may Close Assault any Enemy units in adjacent hexes, unless Assault is prohibited by terrain (see Case 15.3). Units assigned to Anti-Armor may *not* participate in Close Assault (however, see Case 14.23).

[15.22] The Phasing Player announces which hexes he is assaulting, and both Players determine their respective total Points. The Phasing Player states whether his attack constitutes a Close Assault or a Probe (see Case 15.9), and then each individual assault is resolved sequentially, with results being taken as they occur.

[15.23] An Enemy-occupied hex may be Close Assaulted or Probed only once per Combat Segment, regardless of the number of units in that hex. The Phasing Player may not attack some of the units in that hex with one group and some others with another group.

[15.24] As many units from as many hexes as are adjacent to an Enemy-occupied hex may attack that hex, terrain permitting. Furthermore, a Phasing unit may Close Assault more than one hex at the same time, as long as the assaulted hexes are all adjacent to *both* the hex from which the assault initiates as well as adjacent to each other. The units that may participate are listed in Case 15.1.

[15.25] Any number of TOE Strength Points from a unit may be assigned to a given Close Assault (see Case 15.16); however, if the units making a *given* Close Assault have committed *less than 50%* of their available TOE Strength Points, that Close Assault is automatically considered a *Probe* and *not* a Close Assault. You *must* Close Assault with 50% or more of your available strength (although some of those Points may be directed elsewhere) to attack with a normal Close Assault (see Section 16.0).

Example: A unit with a TOE Strength of 7 uses 2 Points to assault Hex A and 1 Point to assault Hex B, withholding the other Point because of ammunition problems. Neither assault is a full Close Assault; both are Probes. If he used 3 Points against Hex A instead of 2, both would be considered Full Assaults, as he would have used at least 50% of his available strength somewhere.

[15.26] Each Player determines which of his units are participating in a given Close Assault. Each Player then determines his Actual Close Assault Strength Points, as stated in Case 15.4. The defending, non-Phasing Player now subtracts his total from that of the attacking, Phasing Player to achieve the Basic Assault Differential. Thus, if the Attacker has 6 points and the Defender eight, the Basic Assault Differential would be − 2.

[15.27] The Basic Assault Differential is now adjusted, where necessary, for Terrain Effects (Case 15.3), Morale (Case 15.6), or Units Size Differential (Case 15.5). These effects result in an adjustment of the Differential *Column* (not the Differential number) either one way or the other, and the cumulative effect of all these upon the Assault Differential produces an Adjusted Assault Differential, which is then used to determine the results of the Assault. Consult the Procedure, Section 15.0. Remember, the two dice are read sequentially (6 and 2 = 62) *not* mathematically (6 and 2 = 8) in Assault Combat.

[15.28] In Close Assault (and Probe) *only*, if one Player has *fewer than 5* Raw Assault Points, he is considered to have *zero* Close Assault Points, and the Differential is determined from that figure. If *each* Player has fewer than 10 Raw Strength Points, the Raw Assault Strength Points are used as if they were Actual Assault Strength Points (see also Case 15.51).

[15.29] There is a possibility that one or both Players do not allocate any units to Assault. In such cases the following occurs:

● If the *Defender/Non-Phasing Player,* for any reason, allocates no units to an Assault *all* his units in that hex automatically retreat *three* hexes and earn *three* Disorganization Points (as if it had taken 30% losses) in addition to any DP's earned by the move.

● If the *Attacker/Phasing Player* does not allocate any units to Assault there is no Assault; it is ignored. This can occur only under Case 10.31 et seq;

[15.3] TERRAIN EFFECTS ON CLOSE ASSAULT

[15.31] The terrain which a defending unit occupies, or which an attacking unit has to cross, may increase or decrease the differential in favor of the attacker/Phasing Player. Players should consult the Terrain Effects Chart (Case 8.37) for a complete list of all effects on Assault combat.

[15.32] The terrain in a hex occupied by a unit is defending against full Close Assault or Probe either has *no* effect on the Differential (e.g., Clear Terrain or Sand/Gravel Terrain) *or* it will decrease the Differential *vis a vir* the Attacker by a specific number of *columns* on the Assault Differential Combat Results Table. Thus a unit defending in a Mountain hex against a Close Assault in which the Basic Assault Differential is + 4 will be Assaulted in the + 1 column, because there is a *three* column shift in favor of the Defender. (Players should note that a unit defending in a Salt Marsh hex shifts the column one in favor of the *Attacker*.)

[15.33] Assaults across certain types of hexsides also decrease or increase the Differential *vis a vis* the Attacker/Phasing Player; e.g., a unit attacking through a Wadi hexside has its Attack Differential decreased by one, in addition to any changes for the hex the defender is in. If *any* units are attacking through a given hexside, the Differential is adjusted as if *all* units were attacking through that hexside.

[15.34] Certain terrain prohibits full Close Assaults or Probes by certain types of units. Motorized units may never assault up an Escarpment, even if it is crossed by a Track. (You may, of course, take your infantry out of the Trucks and then Assault.) Motorized units may not assault units defending in Salt Marshes. Any combat unit in the Zone of Control of an Enemy unit which it cannot attack must be retreated one hex, unless some other unit attacks that Enemy unit.

[15.35] Terrain effects on Close Assault are cumulataive, with one exception. The defender may benefit from only *one* type of hexside (15.33) unless a unit is actually assaulting through a hexside which contains two types of terrain. The latter is quite rare, occurring mostly down in the southern areas of the game-map where some of the wadis run along slope hexsides. (See B5810-B5809).

Example: A unit in a Level Two Fortification in a

Rough Terrain hex being assaulted through a Ridge hexside would shift the Assault Differential six columns in favor of the Defender: two for the Fortification, two for the Rough Terrain, and two for the Ridge hexside. (This is obviously a good position, one that should be assaulted only after being softened up by Barrage and Air Bombardment).

[15.36] Assaults down slopes or down escarpments benefit the attacker. (See Case 8.37, Terrain Effects Chart). If a unit is being attacked through both an up slope and a down slope hexside (this is quite possible in some areas of the game-map), the benefit to the attacker is offset by the benefit to the defender. Thus a unit defending in a hex that is assaulted through a down slope hex (+ 1) and an up-Escarpment hex (− 3) would have an adjustment of − 2 (− 3 + 1 = − 2) in favor of the defender.

[15.4] COMBINED ARMS EFFECT ON ASSAULT

The term "Combined Arms" is used to describe the mutual support of tanks and infantry. Tanks (and tanks only — *not* recce or self-propelled artillery, etc.) must be supported by an equal number of infantry to be completely effective. Thus, for each TOE Strength Point of tanks engaging in Close Assault, there must be an equal number of TOE Strength Point of infantry, machinegun, or heavy weapons units engaging in that Close Assault from the *same hex.* For every one to three TOE *Strength Points* of unsupported tanks, the *Actual Close Assault Strength* of the tanks is reduced by *one.* Thus, if two TOE Points of tanks, each with a Close Assault rating of 7 are assaulting unsupported, the Actual Close Assault Strength is reduced to *zero.* If there were *four* unsupported tank TOE Strength Points, their Actual Close Assault Strength would be reduced to *two.* In no case may the reduction be more than *four* Actual Assault Points. This applies both offensively and defensively.

[15.5] EFFECT OF ASSAULTING FORCE ORGANIZATIONAL SIZE ON CLOSE ASSAULT

Regardless of the Basic Assault Differential, the organizational size (battalion, division, etc.) has an effect on the relative strength in an assault. The greater disparity between the two opposing forces in terms of size of organization, the greater the benefit (in terms of a Column Shift on the Assault Differential Combat Results Table) to the larger unit. This is another rule that reflects the effects of organization and combined arms.

[15.51] If, regardless of the *Basic* Close Assault Differential, one side has at least twice the number of *Raw* Close Assault Strength Points as the other, the superior side adjusts the Assault Differential on the Combat Results Table *two columns* (not numbers) in its favor.

Example: 24 Raw Close Assault Strength Points (2 Actual) assaults 12 Raw Close Assault Strength Points (or 1 Actual). Normally, the differential (not taking into account any other effects) would be + 1. However, because the attacker has twice the Raw strength of the defender, he would assault on the + 3 Column. This adjustment always applies, regardless of any other adjustment to the differential (exception: Case 15.54).

[15.52] If the *largest* (regardless of number of units involved) unit in terms of organization of one side in an assault is bigger than the largest unit organization on the other side there will be a column shift benefitting the side with the larger unit. Unit equivalents apply here (see Case 9.2).

[15.53] The column adjustments for Organizational Size Difference, always in favor of the larger unit size, are as follows:

Largest Unit On:

Larger Side	Smaller Side	Adjustment
Division	3-point Brigade	1
Division	2-point Brigade	2
Division	Battalion	4
Division	Company	8
Any Brigade	Battalion	2
Any Brigade	Company	4
Battalion	Company	2

All of the above are equivalents (9.2).

[15.54] There are certain combat units that have *no* Defensive Close Assault Ratings (e.g., Commonwealth 5.5" howitzers, German 210mm Howitzers). If such a unit is alone in a hex and is Close Assaulted by an Enemy unit, such zero-rated unit is considered to have a Defensive Close Assault Rating of zero. In addition, two other adjustments are made: (1) The attacking unit takes no casualties; and (2) there is a three-column adjustment in favor of the Attacker, in addition to any adjustments for 15.53. Case 15.51 does *not* apply to this situation.

[15.55] For the purposes of this case a brigade is attached to a division only if the brigade HQ unit (counter) is attached to the division. For example, a Commonwealth infantry division with nine infantry battalions and no infantry brigade headquarters attached is a shell in Close Assault. Note that the two Italian infantry brigade counters (ID Code "m") represent the entire brigade.

[15.6] EFFECTS OF MORALE ON CLOSE ASSAULT

The Morale of each side involved in a given Close Assault will affect the Close Assault Differential. A complete discussion of Morale is to be found in Section 17.0.

[15.61] Players first determine their individual Adjusted Morale Rating for that assault (Case 17.2). The Phasing/Assaulting Player then subtracts the Adjusted Morale Rating of the non-Phasing/Defending units from that of the Phasing units. This Final Adjusted Morale number is the number by which the Assault Differential Column will be adjusted. (See Case 15.64).

[15.62] A positive (+) Final Adjusted Morale Rating adjusts the Assault Differential that number of *columns* to the right (in favor of the Phasing Player/Attacker). A negative (−) Final Adjusted Morale Rating adjusts the Assault Differential that number of *columns* to the left (in favor of the non-Phasing/Defending Player).

[15.63] Players should use the "largest unit" rule, as espoused in Case 6.27, to determine Morale Ratings for units with different Morale in the same assault.

[15.64] Following is an extended example of how Morale would affect a given Close Assault:

a. The 15th Panzer Division (Morale of +3) and the Ariete Division (Morale of +1) are Close Assaulting the

b. 2nd New Zealand Division (Morale of +1) with the 1st RNF battalion (Morale of +2) attached.

c. The Axis Divisions both have a Cohesion Level of, say, −4, which will be used to adjust their combined Morale Rating of +2 (both are divisions, so their Morale is combined and divided by the number of divisions, +3 +1 ÷ 2 = 2). The Axis Player now uses his Cohesion Level to adjust

his Morale Rating (see Case 17.2). Consulting the Morale Modification Table (17.4), he rolls a 43 at −4 Cohesion Level, obtaining a −2 adjustment to his Morale. *Axis Adjusted Morale* is now zero (+2 −2 = 0).

d. The Commonwealth Morale for the assault depends on that of the 2 NZ Division, as that is the largest unit. The 2NZ has a +1 Morale and, say, a Cohesion Level of +2. The Commonwealth Player rolls a 63 on the Morale Modification Table, so there is *no* adjustment to the Morale Rating of +1.

e. As the Axis Morale is zero and the Commonwealth Morale is +2, the *Final Adjusted Morale Rating* is −1 (Attacker minus Defender). Therefore, any assault will be modified (by Morale) one column in favor of the defender.

[15.7] HOW TO USE THE CLOSE ASSAULT COMBAT RESULTS TABLE

[15.71] The Close Assault Combat Results Table is a massive Combat Results Table that uses, for each Player, the roll of two dice added *three different ways* to determine a great number of results. It is important to remember that each Player throws the two dice *only once* per assault, with one minor exception (Case 15.73d). Players should consult the Assault Combat Results Table and become familiar with it before playing.

[15.72] The columns of the Assault Combat Results Table are the Assault Differentials (see Cases 15.26 and 15.27). The rows are percentage of losses possible. The numbers in the center of the Combat Results Table are the range of numbers needed to produce the losses (in the rows) under a particular differential (the column). There are additional results at the bottoms of each column: Engaged, Retreat (Defender only), and Captured Possibilities. These are determined from the *same* diceroll as determines the losses.

[15.73] The Close Assault Combat Results Table uses two dice thrown once for each Player to determine all results as follows:

a. To determine his losses, each Player consults the Differential on *his* portion of the Combat Results Table (Attacker or Defender). He then throws two dice, reading the result sequentially, the larger die first. Thus a 2 on the large die and a 5 on the small die would be a 25. The Player would look under the Differential column to find where the 25 would fall, then look to his left to find his percentage of losses. **Example:** The Attacker is assaulting at +3. He throws a 34 to find his percentage of loss. Looking under the +3 Differential Column in the Attacker's portion of the Combat Results Table, we see that 34 falls in the 5% loss row. The Attacker would suffer losses of 5% (see Case 15.8).

b. The *same* diceroll used in (a) is now used to determine Engaged or Retreat results. However, here the dice are *added* together (3 + 4 = 7). Engaged results are always found on the Attacker's portion of the Combat Results Table; Retreats on the Defender's portion. Thus in the above example, the same 3 and 4 would now be *added* to produce a 7. As Engaged results (see Case 15.8) occur only on throws of 8, 9, 10 or 12 at that Differential, the units are not Engaged. However, if that 3 and 4 were the Defender's dice roll, the Defender would have to Retreat one hex (or lose an additional 10%) as one-hex Retreats occur on 4, 5, 6, and 7 at that Differential.

c. Using the same procedure as in (b) above, *adding* the dice together, each Player checks (with his individual diceroll) to see if any of his percentage losses have been Captured. Still using the +3 column, there are no Attacking unit Captured possible in the column, but there are in the (+3

Defender Column. However, the 7 would not result in a Defender Captured, as a diceroll of 2 or 3 is needed to produce Captured units.

d. If a *Captured* does result, this means that a percentage of the losses is captured. Thus if the *Defending* Player in the example we are using threw a 1 and a 2 (12), he would suffer 20% losses, some of which would be Captured (the "3" of 1 + 2 = 3). When a Captured results, the Player throws *one more die* and consults the Prisoners Captured Results Table (15.89). In this case, if the Defender threw a 4, 50% of all his losses rounded up (the 20% of his force) would have been Captured by the Attacker.

[15.74] If, for some reason, both a Retreat and an Engaged result occurs in the same Close Assault, the Retreat takes priority, and the Engaged result is ignored.

[15.75] The Attacker and the Defender *each* roll two dice to determine their results. Both Players use the *same* Differential column, but they each use their own section of the Combat Results Table.

[15.76] If the diceroll produces a zero loss result, Engaged or Retreat results may still occur.

[15.77] The +11 to +17 et seq columns of the Assault Combat Results Table comprise the *Overrun* section of the Combat Results Table. Overrun is not a voluntary action (as in most games). Overrun in *CNA* indicates that the Attacker has amassed such overwhelming strength that he has broken through the defensive line of the Defender, wreaking comparable losses and enabling him to reach and possibly destroy many of the defender's guns (see Cases 15.84 and 15.86). In addition, when Overrun, all Defender losses are rounded *up*.

[15.78] The Assault Combat Results Table is a large and seemingly unwieldy Table. However, it is not difficult to work with, and once the Players understand the mechanics of the different dicerolls and the method of determining losses, they will find that the Assault Combat Results Table produces an unusually wide variety of results.

[15.79] **Close Assault Combat Results Table** (see Charts and Tables)

[15.8] DETERMINING CASUALTIES

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[15.81] An *Engaged* result means that all units involved in that assault are locked in combat. There are extended Capability Point penalties for an Engaged unit leaving an Enemy ZOC (see Case 8.6). Players should place an Engaged marker on all units affected to indicate their status. Engaged markers are removed at the end of the *Operations Stage*. (Players should note that all units that had assault and are still adjacent are in *Contact*, if they are not Engaged.)

[15.82] A *Retreat* of a specific number of hexes means that the affected units (including any units in that hex withheld from combat for any reason, such as Pinned or out of ammo) must move a *minimum* of that number of hexes away from the Enemy unit inflicting the Retreat. They must end the Retreat at least that number of hexes away and should follow the path of least resistance in the direction of their nearest Supply Dump or City. For each hex of mandated Retreat that units cannot or chooses not to Retreat those units suffer an additional 10% loss. Retreats cost Capability Points. Units in major cities (or retreated into a major city) may ignore retreat results (or the rest of any retreat result).

[15.83] Percentage *Losses* are determined in the following manner:

a. The Player affected determines the percentage

loss from the Assault Combat Results Table then

b. Totals all *Raw* Combat Assault strength Points involved in the assault. The Defending/non-Phasing Player would add to this total the Raw Assault Strength Points of any Pinned or previously retreated units in the hex. In an Overrun, *all* Defensive units withheld for any reason are added in.

c. Multiply the percentage of loss times the Total Raw Strength Points. The Attacker rounds *up* to the nearest whole number, while the Defender rounds *down* (but see Case 15.77). Thus a 35.1 would be 36 points for the Attacker but 35 for the Defender. In an *overrun,* 1.1 Defender Points would equal 2. Defenders should remember to *add in* any loss percentage they must take for hexes not retreated (see Case 15.82).

d. The affected Player must now remove enough *TOE* Strength Points to absorb the Raw Points lost. Thus one TOE Strength Point of 2 Defensive Close Assault Ratings infantry would absorb two Raw Points. Remember that some units have different Close Assault Ratings for Attack and Defense, and that the Attacking Player uses Offensive Close Assault Points, etc. (See Case 15.84). Only those units participating in the assault or, for the Defender, that were pinned or withheld may be used to absorb losses of Raw Points.

e. All losses must be applied to units in different hexes (if units in more than one hex are attacked or involved in an attack) *proportionally.* **Example:** If 50% of the Raw Strength Points used by the Phasing Player in a Close Assault are in one hex and 50% are in a second hex, any losses would be divided evenly between both hexes.

[15.84] Guns (i.e., Artillery, Anti-Tank units, etc.) take losses in Close Assault under the following circumstances:

a. If the Defending units are *Overrun* all defending guns, whether Forward or Back, add their Defensive Close Assault Points (if any) to the total for determination of percentage lost. Such units may be used to absorb losses as in Case 15.83.

b. Guns that are *Forward are* subject to losses, based on their Vulnerability Rating. The affected Player must remove at least 50% as many Vulnerability Points of Forward Guns as he has lost Raw Strength Points in that Assault, with the provision that if at least one Raw Close Assault Point is lost then *at least* one Vulnerability Point must be removed (see Case 14.42; Vulnerability uses the same mechanics as Armor Protection). AA/Flak units are not affected by this rule.

c. In addition to (a), if there is an Overrun situation, *all* defending guns are subject to Vulnerability losses, as in (b). Vulnerability losses are taken after percentage losses (a).

[15.85] If, as a result of an Assault, a Player has some of his TOE Strength Points Captured (see Case 15.73) he takes that percentage of his losses as determined in Cases *15.83 and 15.84* and converts them to prisoners or captured equipment, which are then turned over to the Enemy Player. Captured percentages are always rounded upwards.

[15.86] Determine Captured TOE Strength Points as follows:

a. First determine what TOE Strength Points (and concurrently what units) have been eliminated by combat; then

b. Take the Captured percentage of those TOE Strength Points (a);

c. Playerse may use *any* type of TOE Strength Points to satisfy the Captured percentage, remembering that the percentage is taken of Raw Assault Points (either Offensive or Defensive, depending on the situation), not TOE Strength Points (see Case 15.83 for the mechanics of taking losses).

d. Captured infantry-type becomes Prisoner Points, one Prisoner Point for each TOE Strength Point. Captured Guns and/or Tanks may be taken and used by the Enemy as they see fit (see Section 28.0, on Prisoners).

[15.87] If any Player's losses amount to 30% or more of the TOE Strength Points committed to that assault (whether such losses came from committed units or not), all of that Player's units involved gain *three* Disorganization Points. It is faintly possible that both Players could be so affected, and this is allowed.

[15.88] A Player may always voluntarily *Surrender* his units, rather than have them slaughtered. Furthermore, units out of Ammunition or with a −17 or worse Cohesion Level that are assaulted automatically Surrender (see also Case 17.25).

[15.89] **Prisoners Captured Results Tables**
(See Charts and Tables)

[15.9] **PROBES**

[15.91] A Probe is any Close Assault conducted (by the Phasing Player) with less than 50% of his available TOE Strength Points participating in that — or another — attack (see Case 10.31 and 15.25).

[15.92] A Probe may be conducted with any number of units, within the restrictions of Case 15.91.

[15.93] All combat results are the same for both sides, with the exception that all *Engaged* results are ignored, and the units in the Probe — both offense and defense — are *not* in Contact.

[15.94] The "Probing" Player does not have to announce that his assault is a Probe until after the assault is over. Remember, all units are assigned to Close Assault prior to Anti-Armor Combat.

[15.95] If *all* Probing units are Recce-type units, any losses from Close Assault to the Probing units are reduced by 10%.

[15.96] If, in a Probe, the Final Adjusted Differential is *worse than* −3, the units defending against the Probe do not use any Capability Points to defend against such Probe.

AN EXAMPLE OF COMBAT

The following is an extended example of a hypothetical combat. It should clarify much of the preceding sections, which rules, until actually applied, may seem somewhat convoluted and mystical.

The Commonwealth Player, in Hex "A", has an Armored Brigade Group containing one battalion of Stuarts (TOE Strength of 8), one battalion of Crusader II's (TOE Strength of 7), one motorized infantry battalion (TOE Strength of 5), an Anti-Tank Regiment of 2-pounders (TOE Strength of 6), and a regiment of 25-pounder Artillery (TOE Strength of 6). The brigade has a Basic Morale of +1 and a Cohesion Level of −3. The terrain in the hex is Rough.

The Axis Player has two forces, one in Hex "B" and one in Hex "C". In Hex "B" is a Kampfgruppe (Brigade) consisting of a battalion of 8 TOE Points of PzIII Specials (Tanks), two battalions of infantry (each with TOE Strength of 7), and a regiment of 105mm Guns (TOE Strength of 6). In the adjacent hex ("C") is a small force consisting of one infantry battalion (TOE Strength of 7) and a battery of 105mm Guns (TOE Strength of 4). The Axis Basic Morale is +2, with a Cohesion Level of −2. The Axis Player's units are all German, and he is the Phasing Player. He attacks. (Note that the given Cohesion Levels include the Capability Points expended for the attack/defense.) The Axis Player, wishing to get full use from his two Artillery units, places both of them in *Forward* position. The Commonwealth Player, having enough Anti-Tank strength with his two tank battalions and anti-tank regiment, decides not to use his 25-pounders in an Anti-Tank role and places them *Back,* for protection. Both Players now choose their targets for Barrage. The Axis Player, noting the Commonwealth anti-tank strength (he knows there are two tank battalions and two gun units) decides to direct his full Barrage against one of the Tank Battalions. He thus totals his Barrage Points which can be combined because his Guns are Forward, (ten 105's — Barrage Rating 9 — at a TOE Strength of 10 = 90 Raw Barrage Points) and finds he has 9 Actual Barrage Points. The Commonwealth Player, with six 25-pounders (Barrage Rating of 8) will use all 5 Actual Barrage Points (6 × 8 = 48, or 5) against one battalion of infantry (as he fears the Assault more than the Anti-Armor fire — a guess, really, as to the Axis intentions — and the Infantry unit is an easier target). Both Barrage simultaneously, adjusting for terrain (the Axis units are all in Clear Terrain.)

The Axis Player Barrages, using the "7,8" column on the Barrage Table (adjusting from "9,10" because of the Rough Terrain). He needs a roll of 36 or lower to pin the Tank battalion and he throws a 25. The result is that his target, which turns out to be the battalion of Stuarts, is Pinned and may not participate in any further combat. The Axis Player throws again rolling a "6". This results in two Truck Points destroyed although the infantry they are transporting is unharmed. The Commonwealth Barrage, on the "5,6" row results in No Effect when the Commonwealth Player rolls a 61. Note that no defending trucks are present so no second roll is necessary. Both Players now deduct any Ammunition expended.

The Commonwealth Player decides not to Retreat Before Assault with any of his units, and the Players now assign their units to either Anti-Armor or Close Assault (or nothing). The Axis Player assigns five points (of his 8 available) of his PzIII Specials to Anti-Armor and all three of his infantry battalions to Close Assault. He does not use his Artillery for Assault as he wishes to save ammunition. The Commonwealth Player assigns his Infantry battalion to Defend against the Assault and puts his Crusaders into that Assault. His Stuarts are pinned and cannot participate, but he does use his Anti-Tank guns for Anti-Armor Fire. His artillery is Back and may not participate in either Anti-Armor or Close Assault.

The Axis Player has 3 Anti-Armor Points (5 TOE Points of PzIIISpec. with an Anti-Tank rating of 5 × 6 = 30, or 3 Actual). The Commonwealth Player has only 2 (his 6 TOE Points of 2-pounder Anti-Tank, rating of 4 = 24, or 2 Actual). If his Stuarts had not been Pinned, they could have aided his Anti-Armor effort. Both Players now fire simultaneously. The Axis Player rolls a 51, and the, result on the Anti-Armor CRT is a "4". This means that the Commonwealth Player must remove enough Crusader TOE Points to absorb 4 Armor Protection Points. (He cannot use his Stuarts as they have been pinned and do not enter into *Anti-Armor* loss calculation). As Crusader II's have an Armor Protection Rating of 3, he must remove 2 TOE Points of Crusaders to absorb the loss. Likewise, the Commonwealth Player fire Anti-Armor, rolls a 55, resulting in a 3. Each PzIII Special has an Armor Rating of 4, so the Axis Player removes 1 TOE of PzIII Specials (taking them from those tanks assigned to Anti-Armor, rather than upset his Assault power.)

Both Players now determine their Assault Differentials. The Attacking Axis has 42 Raw Points

from Infantry (7 × 2 × 3 = 42) and 21 Raw from his tanks (7 × 3 = 21) for a total of 63 Raw Points, or 6 Actual. As he has 21 Infantry TOE Points and only 3 Tank TOE Points, he has no problems with Combined Arms effects on Assault. The Commonwealth Player has 10 Raw Infantry Points (5 × 2 = 10) plus 28 from his Crusaders (7 × 4 = 28) for a total of 38, for a 4 Actual. However, as he has two more Tank TOE Points than Infantry (7 to 5), he subtracts 1 Actual Point for Combined Arms Effects. The Basic Differential is thus 6 to 3, or + 3 for the Axis.

Each Player now checks for his actual Morale at time of Assault. The Axis Player has a + 2 Basic Morale with a Cohesion Level of − 2; he consults the Morale Modification Table, throws a 21, and gets a No Change to his Basic Morale. So his Adjusted Morale is + 2. The Commonwealth Player has a Basic Morale of + 1 with a Cohesion Level of − 3. Using his − 3 Cohesion he also consults the Morale Modifier Table, throwing a 53. This results in a modification to his Morale of − 2, for an Adjusted Morale of − 1. Comparing his Morale to that of the Axis Player shows a Finalf Adjusted Morale of + 3 (+ 2 − [− 1] = + 3). This + 3 means that the Axis Player will adjust the Assault Differential Column three in his favor. However, the Commonwealth units are in Rough Terrain, which is a two-column adjustment in *their* behalf, so the final column adjustment is + 1 for the Axis. (There is no question of a unit Size/Organizational Difference here.) Thus, with a Basic Differential of + 3, and a one-column adjustment for the Axis, the assault takes place on the + 4 Column.

Each Player now throws two dice and consults his portions of the Assault Combat Results Table to determine his losses. The Axis Player throws a 32. That means he loses 5% of his Assaulting Force, and there are no other results for him (i.e., he is not Engaged). The Commonwealth Player throws a 21. He has several results from this: (1) He loses 15%; (2) He has 33% of these Captured (an additional die roll of 4); and (3) he must Retreat all his units at least one hex (or take an additional 10% loss, which would further affect the Captureds).

The Axis Player Assaulted with 63 Raw Points, which he multiplies by his 5% Loss to get 3.15, or 4 Raw Points (the Attacker always rounds upwards). He removes two Infantry TOE Points (onefrom each of two battalions) to absorb the 4 Raw Points (each of his Infantry has an Assault Offensive Rating of 2, so 2 TOE of these equals 4 Raw Points). In addition, the Axis Player has his Artillery forward, so he must remove 50% of his Raw Points Lost in terms of Vulnerability Points. This means he has lost 2 Points (Vulnerability) of Artillery. As each 105mm Gun has a Vulnerability of 9, he would have to remove one of his Guns to absorb the 2 point loss. The Axis Player's losses are thus 2 TOE Points of Infantry (or about 200-300 men), 5 Panzers (1 TOE), and 1 TOE of 105mm guns (or 4 guns, for this type of gun).

The Commonwealth Player now determines his losses. He used 38 Raw Points; but he also has Pinned Stuarts, which must be included in the total. There are 8 TOE of these, with a Defensive Assault Rating of 4, for a total of 32 Raw, for a Grand Total of 70 Raw Assault Points. His losses are 15%, or 10.5 Raw Points, rounded down to 10. Of these, 33% are captured, or, rounding upwards, 4 Raw Points Captured. The Commonwealth Player has 2 Infantry TOE Points Captured (to absorb the 4), and eliminates 1 TOE of Stuart Tanks (4 Raw) and 1 more Infantry Point (2 Raw) to satisfy the 10 Points lost. He then Retreats his entire Force one hex, rather than incur additional losses. He has had about 150 men killed, about 300 men captured, and lost 5 Stuart and 10 Crusader Tanks. He has also lost his position.

The Commonwealth suffers no additional losses to his Cohesion Level, aside from those earned in moving the one hex (to Retreat). However, the Axis Player earns three Reorganization Points for pushing the Commonwealth Player out of the hex.

[16.0] PATROLS AND RECONNAISSANCE

GENERAL RULE:

Patrols may be conducted in order to determine the identification and strength of opposing units. In any Operations Stage in which *no* Anti-Armor or Close Assault combat has taken place a Phasing Player may "pull" men out of certain types of units to patrol in the Patrol Segment. To patrol, the Phasing Player announces how many Patrol Points are Reconnoitering a given hex. He consults the Patrol Survival Table, takes losses, if any, then refers to the Reconnaissance Table to see how effective his patrol has been. Depending on his success on the Reconnaissance Table, the non-Phasing Player must tell him information about a given number of units. *No* units actually move during patrol; patrolling is handled abstractly.

PROCEDURE:

To patrol, the Phasing Player announces the number of Patrol Points he wishes to allocate to a given patrol, expends the necessary fuel and ammunition, and states which hex is being patrolled. He consults the Patrol Survival Table (16.6) and rolls one die to determine any Patrol casualties (unless no combat units are present in the hex; see Case 16.32). If Patrol Points remain (that is, if the patrol is not wiped out), the Phasing Player rolls one die and cross-references the result with the number of remaining Patrol Points on the Reconnaissance Table (16.7) to determine what (if any) information his patrol garners. The non-Phasing Player must now reveal information as required by the results of the die roll. Finally, the Phasing Player rolls one die and consults the Objective Loss Table (16.8) to determine if there are any non-Phasing unit casualties and, if so, they are extracted.

CASES:

[16.1] WHICH UNITS MAY PATROL

[16.11] Only Recce-type, Light Tank (Italian CV/33's, British Mark VI Lights, or German Panzer I's), or Motorized Infantry may supply Patrol Points for Reconnaissance.

[16.12] The Phasing Player subtracts — or rather detaches — TOE Strength Points from the unit/TOE types allowable (Case 16.11) and designates them as Patrol Points. **Example:** a Phasing Player detaches two Recce TOE Strength Points from a Recce battalion in Hex A and assigns them as Patrol Points to Reconnoiter Enemy-occupied Hex B. The Player notes on his TOE Log sheets the assignment and any resultant casualties.

[16.13] No more than 2 TOE Strength Points may be assigned as Patrol Points from any one *hex*, regardless of the number of units in that hex.

[16.14] The maximum number of Patrol Points that may be sent to an Enemy-occupied hex is 3, with Patrol Points from different hexes having the capability of combining forces for a Reconnaissance operation.

[16.15] No unit with a Cohesion Level of − 8 or worse may assign TOE Strength Points to patrol duty.

[16.16] For each Patrol Point sent out on Reconnaissance, the Phasing Player expends one Am-

munition Point and 2 Fuel Points. These supplies must be present in the hex the Patrol Points originate from, and they are expended regardless of the result of the patrol.

[16.17] No Patrols may originate from or be directed into any hex affected by a Rainstorm or Sandstorm.

[16.2] RESTRICTIONS ON PATROLLING

[16.21] In any Operations Stage that a Phasing Player does *not* engage in Anti-Armor Combat or Close Assault against any Enemy units, he may patrol. In addition, although a Player may patrol if he has used Artillery Barrage during a given Operations Stage, he may not Reconnoiter any hex which has undergone any type of Barrage or Air Bombardment. A Phasing Player may launch as many patrols as he wishes.

[16.22] Patrol Points may reconnoiter any Enemy-occupied hex within five *hexes* of the hex the Patrol Points originate from. The five-hex path may not include any terrain impassable to the units in the patrol (see Case 16.11), nor may they pass through an Enemy-controlled or occupied hex other than a hex in the Zone of Control of the unit being reconnoitered.

[16.3] PATROL LOSSES

[16.31] Both Players — the Patroller and the Patrollee — must check for any possible combat losses from Patrol action. However, each Player checks at a different time.

[16.32] The Phasing Player, after assigning his Patrol Points to Reconnoiter a specific hex, consults the Patrol Survival Table before reconnoitering, with one exception. The non-Phasing Player must inform him if there are *no* combat units in the hex which is being reconnoitered. If there are no combat units in that hex, the Phasing Player skips the Patrol Survival Table and suffers no losses. AA/Flak and Engineer units are *not* combat units for this purposes.

[16.33] The Phasing Player now rolls one die and consults the Patrol Survival Table. If *all* his Patrol Points are from Recce units he subtracts one from the die roll. Any losses — in TOE Strength/Patrol Points eliminated or captured by the *non*-Phasing Player (including trucks) — are deducted immediately (Phasing Player's choice as to unit type), Captured Points become Prisoner Points. If *no* Patrol Points survive, the Phasing Player goes no further; he gets no information.

[16.34] After the Phasing Player has gotten his information, *or* after having had all his units eliminated (whichever comes first) the Phasing Player rolls another die to see whether he has inflicted any losses on the non-Phasing Player, regardless of the losses he (the Phasing Player) has taken. There is one exception to this: if the Phasing Player's patrol is eliminated in entirety, the Captured result on the Objective Loss Table becomes an Eliminated. The choice of loss (in TOE Strength Points) is up to the non-Phasing Player, but it must come from a combat unit. If there are no combat units, the non-Phasing Player may eliminate either Truck Points, AA/Flak Points, Engineer Points, or HQ Points, in that order of priority.

[16.4] DUMMY TANK FORMATIONS

Dummy Tank Formations consisted of mock-ups of Tanks, usually made from wood or canvas covered cars (the Germans used Volkswagons), designed to fool Enemy intelligence into thinking there were Tank Brigades in places where they weren't.

[16.41] Each Player may use Dummy Tank Formations. These are the equivalent of Tank battalions in size, but they are worth nothing in combat. Their CPA is zero.

[16.42] To bring a Dummy Tank battalion into play, a Player must expend 10 Stores, which must be present in the hex in which the Dummy is "placed." Dummy Tank battalions are placed in the Construction Segment. There are no actual counters for Dummy Tanks.

[16.43] No Player may ever have more than three Dummies in existence at any one time. No more than one Dummy may be in any one hex. No Italian formations may ever make use of Dummies, even when mixed with German formations.

[16.44] Dummy Tank battalions may be assigned identifications actually used by other Tank battalions in play. Example: The Commonwealth Player may say Dummy Tank Battalion #1 is the 4th Royal Tank Regiment, even though the 4 RTR is in play elsewhere on the game-map.

[16.45] Dummies really have only one function: to confuse Enemy intelligence. Thus they are worthless alone in a hex. Whenever a Player conducts Reconnaissance against an Enemy hex, the Enemy Player, if he has a Dummy Tank unit in that hex, may tell him that he has the "X" Tank battalion of any TOE Strength desired, when revealing information. The patrolling Player has no way of knowing that this is a dummy or not (until he attacks).

[16.46] If a formation with a Dummy Tank battalion undergoes *any* type of Close Assault, the Dummy Tank Battalion is eliminated. If a formation undergoes Anti-Armor fire and has no armor — or loses all its armor — the Dummy Tank Battalion is eliminated. Anti-Armor fire committed against Dummy Tanks may not be switched to Assault if the only "armor" is Dummy Tanks!

[16.47] For the historians, The Household Cavalry Regiment, a Commonwealth Armored Car unit, was assigned to North Africa. However, it does not appear in the OA Sheets as it saw minimal action and was assigned *mainly* to handling the task of fitting out and overseeing the Commonwealth Dummy Tank Formations.

[16.5] RESULTS OF PATROLS

The Reconnaissance Table (16.7) results are expressed in terms of the number of battalion-size units about which the non-Phasing Player *must* reveal information. Thus, if the Phasing Player has two Patrol Points and obtains a die roll of 4, he will be told about two of the Enemy's units.

[16.51] The non-Phasing Player must reveal the following information about units: historical designation (*e.g.,* I/8 Panzer Battalion), type of unit (mechanized infantry, armored cars, etc.), whether the unit is motorized or not, and the exact TOE Strength within two of the actual strength at the time of the Patrol.

[16.52] The non-Phasing Player may choose the units in a hex about which he will reveal the information listed in Case 16.51, if more of his units are in the hex than he is required to give information about (exceptions: see Case 16.53, 16.54, and 16.55).

[16.53] Information must be revealed about battalion-sized units, unless *only* smaller (or larger) units are present.

[16.54] Information may not be revealed about HQ units or AA/Flak units unless there are no combat units in the hex. Information *may* be revealed about Engineer units.

[16.55] The Phasing Player may specifically list units about which he does *not* wish to receive in-

formation, and the non-Phasing Player may not choose such units to satisfy the requirements of Case 16.5. (Presumably, such units would be ones that the Phasing Player already had adequate information about, because of previous patrols or combats.)

[16.6] PATROL SURVIVAL TABLE
(see Charts and Tables)

[16.7] RECONNAISSANCE TABLE
(see Charts and Tables)

[16.8] OBJECTIVE LOSS TABLE
(see Charts and Tables)

[17.0] MORALE

GENERAL RULE:

The Morale Rule in *CNA* attempts to quantify a facet of combat that is so subjective that it virtually defies all such attempts. The result: subjective opinion plays an important part in what is otherwise a highly objective game. In any case, the Morale rules combine the elements of a *Basic Morale Rating* (representing initial training, fitness, enthusiasm, secondary command capability, etc.), which is a fixed number (with one exception; see Case 17.3), with the effects of constant campaigning and victory or defeat. The *Cohesion Level* of a unit is used to raise or lower the Morale Rating of a unit at the instant of Close Assault. This adjusted Morale Rating is then compared with that of the opposing Player to adjust the Assault Differential one way or the other.

CASES:

[17.1] UNIT BASIC MORALE RATINGS

Each unit in the game has a Basic Morale Rating, listed on its OA Sheet, which, with the exception of Training (Case 17.3), never changes (although it may be adjusted by Cohesion for individual assaults). The Morale Ratings run from +3 to −3. The Basic Morale Rating of a battalion (or brigade) is always that of its assigned Parent Formation, unless the unit has been attached to another force or has been out on its own.

[17.2] ADJUSTMENTS TO BASIC MORALE RATINGS

[17.21] Every time a unit is involved in a Close Assault (or Probe) its Basic Morale Rating may be adjusted by its Cohesion Level at the instant of Assault. The effect of Morale on Assault has been discussed in Case 15.6.

[17.22] In order to determine the effect of a unit's Cohesion Level on its Basic Morale Rating, the Players use the Morale Modification Table (17.4). This is another table that uses a two-dice sequential read out (11-66), with the diceroll taking up the "center" of the Table. In this case, the Cohesion Level of the unit is on the left, comprising the *rows* of the Table, while the Morale Modifier — the number the Player is rolling for — is on the top of the Table, comprising the columns. Example: A unit has a Basic Morale Rating of +1. It goes into an Assault with a Cohesion Level of −4. The Player consults the Morale Modification Table and throws two dice, getting a 42. Locating the row for −4 Cohesion, the Player reads across until he finds the column in which a diceroll of 42 is located. That roll is in the −2 column, so the Morale Modifier is −2, and the Basic Morale is adjusted by that number (+1 −2 = −1). The unit's Adjusted Morale Rating for that Assault is −1.

[17.23] The maximum *Adjusted* Morale Rating a unit can ever have is +3, and the minimum −3, regardless of what mathematical possibilities occur. Thus a unit with a +2 Basic Morale Rating that earns a +4 modifier does not get an Adjusted Rating of +6, but just +3 (exception: see Case 17.28).

[17.24] All Cohesion Levels of −17 or worse use the "−17 et seq" row. All Cohesion Levels of +8 or higher use the "+8" row.

[17.25] The farthest column on the right is the *Surrender* column. If a combination of Cohesion Level and diceroll places the Modifier in that column, the affected units immediately Surrender (and become Prisoners, see Section 28.0; Exception: Case 17.26). If *both* units, for some strange reason, get a Surrender Modifier, the Surrenders are ignored, no assault occurs, and both sides are Engaged.

[17.26] If a unit or a Formation with a *Basic* Morale (individual or combined) of +1 or better is involved in a Morale Adjustment computation, such unit follows the Morale Adjustment Table normally with one exception: *it ignores all Surrenders* (treating them as a −4 adjustment). However, it does not ignore the "Surrender" if one of the following is in effect:

a. The unit has a Cohesion Level of −11 or worse; *or*

b. The Enemy unit(s) has *at least* 3 times the Strength (Enemy Raw Offensive Assault to Friendly Raw Defensive Strength).

[17.27] It is possible that a given Player has units of different Cohesion Levels in the same assault. The method of determining the applicable Cohesion Level is the Largest Unit Rule, discussed in Case 6.27.

[17.28] Axis units stacked with *General Rommel* at the instant of Assault have their *Adjusted Morale Rating* further adjusted by +1. Thus a unit with an Adjusted Morale Rating of 0 that is assaulting under the direct command of Rommel has an Adjusted Morale Rating of +1.

[17.3] TRAINING

Several of the Commonwealth units arrived in Egypt ill-prepared to fight a desert campaign. Therefore, their Morale Rating on arrival is lower than their assigned Basic Morale. In order to reach their assigned Basic Morale they must undergo *Training.*

To forestall questions on the subject, only Commonwealth units must undergo training for a variety of reasons. Most German units had already undergone considerable combat before arriving in Africa, and, although they were no more desert-acclimated than any other forces, this previous experience counted for much, in the designers' minds. As for the Italians, most of these units had served in Africa, had seen combat, or are of too low a designated morale to bother with training. Those Commonwealth units designated for Training are based on unit descriptions and fitness reports in the various sources.

[17.31] Units that are in need of Training have, on their OA Sheets, *two* Basic Morale Ratings. The rating in parentheses is the *Untrained* Rating; the other Rating is the maximum level of Training and Experience that that unit may reach, through Training.

[17.32] A Commonwealth unit undergoes Training in any one of three *areas:* Cairo (any one of the city hexes); Helwan (1430); or Alexandria (any city

hex), or Amiriya, Abouqir or Deghelia.

[17.33] To undergo Training a unit may not expend *any* Capability Points during an Operations Stage. If, for any reason whatsoever, a unit expends CP's during an Operations Stage, its Training has been interrupted.

[17.34] For every *six* Operations Stages that a unit undergoes Training, it raises its Untrained Basic Morale Rating *one* point. (Thus, a −1 would become a 0, a +1 a +2, etc.) It may *never* exceed its designated Basic Morale.

[17.35] In order for a unit to undergo Training, a combat battalion which has (or has reached) its designated Basic Morale must be present in the hex with the Training unit during each Operations Stage of Training. Infantry divisions or brigades may use an Infantry-type battalion; any unit with tanks must have a Tank battalion present to train. Such instruction battalions do *not* count against stacking limitations, and such battalions used for instructional purposes must be at least ⅓ of their assigned TOE Strength. Each instruction battalion may train as many units as may be stacked in that hex.

[17.36] Units are not required to undergo Training; they may enter combat with their lesser Morale Rating and then be pulled back at a later time for Training. However, only Training can permanently raise the Basic Morale Rating, regardless of the amount of combat encountered.

[17.37] Commonwealth And Axis (see Case 20.43) Training Areas are indicated on the game maps.

[17.4] THE MORALE MODIFICATION TABLE (see Charts and Tables)

[17.5] VOLUNTARY SURRENDER OF UNITS

A Player's units may be captured thru lack of combat ability or be forced to surrender as a result of morale determination during a Close Assault, lack of ammunition of possessing 26 or more Disorganization Points. A player may voluntarily Surrender his units under certain conditions.

[17.51] A Player may voluntarily surrender units. The surrendered units are treated as though they were captured or involuntarily surrendered (e.i., create prisoners for the infantry and turn the tanks, guns, and aircraft into replacements).

[17.52] In order to voluntarily Surrender the following conditions must be met:
A. The event is not occuring during Step "b" thru "f" of a Combat Segment.
B. All of the units, Replacement Points, etc. in that hex at that instant are being surrendered.
C. The surrendering units must be adjacent to an Enemy combat unit and be able to be moved directly into that unit's hex.

[17.53] Units may be surrendered to an Enemy combat unit of any size or status (except 17.54).

[17.54] The enemy unit must accept the surrender, expending 2 CP's to do so. If the Enemy unit cannot expend 2 CP's the units may not voluntarily surrender.

[17.55] The owning Player may attempt to destroy part of the unit's material at the instant of voluntary surrender. This may only occur *after* he has declared that units in a hex are being voluntarily surrendered. The Player may not attempt to destroy anything that may not be moved or may only be moved in his Phasing Truck Convoy or Repair Phase.

[17.56] The Player may attempt to destroy any portion of his eligible material. Two determina-

tions are made, one for tanks and guns and one for trucks/Motorization Point.* The Player determines how his attempt at destroying tanks and guns has fared by rolling one die, subtracting one from the die roll and then multiplying by 10% (e.g., a roll of 4 results in the destruction of 30% of all designated tank and gun TOE Strength Points). Trucks/Motorization Point destruction is determined in a similar manner except that the modified die roll is multiplied by 20%. Round fractions down.

[17.6] TRAINING CHART
(see Charts and Tables)

[18.0] RESERVE STATUS

COMMENTARY:

The Reserve Rule was prompted by the unusual Time-in-Space problems encountered using the Capability Point Allowance System and Continual Movement. It protects the Defender from having the Phasing Player perform feats of incredible speed and agility far out of synch with the Laws of Motion, Time, and Inertia while, at the same time, enabling the Phasing Player to hold back certain units to exploit holes in the line. In essence, units in Reserve — not moving while the other units are — are still consuming "time" while they stand. Thus their capability to move and fight is reduced according to how long they spend in Reserve.

GENERAL RULE:

Reserve is a status which enables units to circumvent the rule that states a unit must be within two hexes of an Enemy unit to take advantage of the Continual Movement Concept. Units are placed in Reserve Status in the Friendly Reserve Designation Phase. At varying times during the Movement/Combat Phase the Player has the opportunity to pull a unit out of Reserve and use it, with varying degrees of restrictions, dependent on the length of stay in Reserve.

CASES:

[18.1] WHICH UNITS MAY BE PLACED IN RESERVE

Reserve
1

[18.11] Any units belonging to the Phasing Player may be placed in Reserve. The non-Phasing Player may not place units in Reserve.

[18.12] Units assigned to Reserve Status must be so designated in the Reserve Designation Phase of the Operations Stage. Units are so designated by placing a *Reserve I* marker on top of them.

[18.13] Units still in Reserve during the first Reserve Release Segment of each Movement/Combat Phase, must either be released or have their Reserve I marker flipped over to its *Reserve II* side.

[18.14] Units in Reserve II Status remain in that status until either they are released in a subsequent Reserve Release Segment of that Operations Stage or the Operations Stage ends.

[18.15] Units may be placed in Reserve only in the Reserve Designation Phase. No unit may be placed in Reserve during the Movement/Combat Phase.

[18.2] EFFECTS OF RESERVE STATUS

[18.21] There are two states of Reserve: *Reserve I* and *Reserve II*. The Reserve marker on top of the units indicate their current Reserve Status.

[18.22] In a Movement Segment, units in Reserve I status may move *one* hex (regardless of Capability Point expenditure) as long as they do not enter an Enemy-controlled hex. Units in *Reserve II* status may never move.

[18.23] A unit in *Reserve I* status may be released from such status in the Reserve Release Segment in

the *first* Reserve Release Segment in that Operations Stage; i.e., after other units have been moved once. Such a released unit may then move and fight in the ensuing Movement and Combat Segments with the following restrictions:

1. It may not voluntarily exceed its Capability Point Allowance in that Operations Stage; and
2. It may engage in only *one* offensive Close Assault in that Operation State.

[18.24] A unit in *Reserve II* Status may be released in any Reserve Release Segment subsequent to the first Reserve Release Segment of a given Operations Stage. Such a unit may then move and fight with the following restrictions:

1. It may not voluntarily exceed *one-half* its Capability Point Allowance (rounded down) in that Operations Stage. Thus, a non-motorized infantry unit emerging from Reserve II Status would have a CPA of '5' that Operations Stage, which it could not voluntarily exceed; and
2. It may engage in only *one* offensive Close Assault (or Probe), within the restrictions of (1), above, in that Operation Stage; and
3. If it does voluntarily engage in any Close Assault, Anti-Armor or Barrage that Operations Stage it automatically earns *one* Disorganization Point, in addition to any others it might earn.

[18.25] Units released from Reserve may be moved (in the immediately subsequent Movement Segment only) even if they are not within two hexes of an Enemy unit, which is an exception to Case 8.23.

[18.26] Placing a unit in and releasing it from Reserve Status does *not* cost any Capability Points.

[19.0] ORGANIZATION AND REORGANIZATION

COMMENTARY:

As has been discussed previously in a variety of sections, the Organization of the various units — i.e., which battalions are part of which Brigade, which Brigades and support units form which Division, etc. — is important to the play of the game, particularly as pertains to Stacking. The basic Organizational heirarchy is pyramidical: 2-3 battalions form a brigade, and 2-3 brigades form a Division. This Section discusses which units are *Assigned* to a Parent Unit and which units may be *Attached,* how to Attach and Detach units, and when and how units may be built up to maximum strength.

Important: Players should be aware that this Section is one that could cause considerable problems unless certain basic tenets are understood. First of all, this Section is an attempt to formulize Organizational Doctrine; the Players are being forced to mold and use their armies in much the same way as the commanders did 30 plus years ago. And if it frustrates the Player not to be able to do things that are clearly beneficial, imagine how it was to those actually fighting this campaign. Furthermore, these Organizational rules are not, and should not be, considered as strict, rigid proscriptions. Rather, Players will find them easier to use if they attempt to understand the principles underneath them, and then use the accompanying charts and tables as guides. The charts and tables reflect the maximum Attachments and Assignments; anything within those limits can certainly be accomplished. Most of all, this Section should be played with attention to the flavor and meaning of the campaign which is being fought.

GENERAL RULE:

Each unit represented by a counter in the game is

either *independent* or *assigned* and/or *attached* to a *Parent Formation*. Companies, battalions, and brigades may be *assigned* and/or *attached;* division HQ units are always *independent.* Divisions, brigades, and battalions may have subsidiary units *attached* or *assigned* to them (*i.e.,* be Parent Formations). Historical *assignments* are listed on the Organization at Arrival Chart (O/A Chart, see Case 4.4); within limits, Players may alter these assignments. Players may more freely alter *attachments.* Limitations on such alterations are generally related to the capacity of the Parent Formation(s) to absorb subsidiary units. The historical TOE of battle (not the units themselves, but how many of each type there were) of every potential Parent Formation is listed on the Formation Organization Chart (19.3). Restrictions on additional attachments are listed for each Formation on the Maximum Unit Attachment Chart (19.5).

[19.1] DIFFERENCE BETWEEN "ASSIGNED" AND "ATTACHED" UNITS

[19.11] A unit is *assigned* to a specific Parent Formation if that unit is considered a part of that Parent Formations organization (e.g., the 8th Panzer Regiment — a Brigade equivalent, see Case 9.2 — begins the game *assigned* to the 15th Panzer Division).

[19.12] A unit is *attached* to a specific Parent Formation if the counter representing the Parent Formation on the map represents the attached unit as well. (i.e., not only are both the attached unit and the Parent Formation in the same hex, but they are functionally combined into one unit).

[19.13] It is possible for the same unit to have *two different* Parent Formtaions simultaneously, one to which it is *assigned,* and one to which it is *attached.* A unit may never be attached to more than one Parent Formation at once; nor may a unit ever be assigned to more than one Parent Formation at once. **Note:** A unit *must* be in the same hex as a Parent Formation to which it is attached (indeed, it is represented on the game-map by the Parent Formation's counter); it need not be in the same hex as a Parent Formation to which it is *assigned.* Of course, a particular unit may be both *assigned* and *attached* to the same Parent Formation.

[19.14] It is possible for the same unit to be a Parent Formation and to simultaneously be, in turn, assigned and/or attached to another (higher level) Parent Formation. Note that the units attached to a particular Parent Formation may affect whether or not it can be attached in turn to another unit.

Example: If the 1st Kings Royal Rifle Corps was detached from the 7th Armored Division (its assigned Parent Formation) and sent to support the 2nd New Zealand Division; the 1st KRRC, when absorbed by the 2nd NZ would become attached to one units and assigned to another.

[19.2] UNIT ASSIGNMENTS

Each Parent Formation (or potential Parent Formation) has an inherent set of limitations on the number and/or type of subsidiary units which may be assigned to it. These limitations are listed on the Formation Organization Chart (19.3). **Example:** An Italian armor Brigade may have assigned to it three armored battalions.

Units enter the game already assigned to a specific Parent Formation. Assignments are generally permanent, with excepetions for eliminated units for historical assignment shifts and assignment pattern shifts, and for British battalions, as detailed in the following Cases. Any new assignments or reassignments are accomplished during the Player's

Reorganization Segment and recorded on the appropriate Parent Formation's TOE Log Sheet.

[19.21] Any Parent Formation which has fewer units assigned to it than its maximum (see Case 19.3) may be assigned additional independent (non-assigned) units up to that limit (e.g., If only two armored battalions were attached to an Italian armor brigade, the Axis Player could, in his Reorganization Segment, assign any independent Italian armored battalion to that brigade). In order to be assigned to a Parent Formation, an independent unit must be currently attached to it.

[19.22] Should a unit's assigned Parent Formation be eliminated, (see Case 19.11), if that — presumably detached — unit survives, it is considered independent and eligible for re-assignment in accordance with Case 19.21 and 19.3.

[19.23] Should an assigned unit be eliminated, the assignment is considered terminated and another independent unit may be assigned to the Parent Formation in the eliminated unit's place. (i.e., eliminated units do not count towards the limitations listed in Case 19.3).

[19.24] The OA Chart (Case 4.45) contains notes concerning historical shifts in assignment relationships for several units. Players are free to either institute or ignore such assignment shifts at their option, within the restrictions of Case 19.21 (see also Case 19.25). Such re-assignments *must* be accomplished sometime during the month listed on the OA Chart note, or not at all.

Example: When the German 15th Panzer Division arrives it contains the 115th Panzergrenadier (motorized infantry) Regiment, albeit in a somewhat reduced state. At a later date, listed in the notes of the 15th Panzer and 5th/21st Panzer divisions, that the 115th Regiment, originally *assigned* to the 15th Panzer, becomes part of the 21st (nee' 5th Light) Panzer Division, taking on some additional units to flesh out its structure. If the Player wishes to switch the 115th to the 21st Panzer Division, the 115th would then be assigned to the 21st Panzer as per this case.

[19.25] As indicated on the Formation Organization Chart (19.3), the historical assignment limitations on Commonwealth armored divisions and brigades changed three times. The Commonwealth Player may, at his option, assign available independent units to such Parent Formations when these changes allow additional units to be assigned. The Commonwealth Player *must* "unassign" excess units whenever new limitations require him to do so.

[19.26] A special rule applies to Commonwealth Brigades (both Infantry and Armor). Throughout the war, the Commonwealth made it a practice to shuffle individual battalions from one "assignment" to another. This was especially prevalent in the Indian units, where battalions like the 2/5 Mahratta Light Infantry appears virtually everywhere. Therefore, the Commonwealth Player is permitted to pull assigned battalions from a Brigade and replace them with others from another Brigade (or from the unassigned group). Such battalions are then considered assigned to their new Brigade. Battalions may only be reassigned or shuffled; they may not simply be "unassigned" and made independent. **Example:** The 2nd Armored Brigade (1st Armored Division) may pull the 10th Royal Hussars and 9th Lancers out, send them to Alexandria for refitting (with, perhaps, new tanks, etc.) and replace them with the 4th and 7th Royal Tank Regiment. The latter two units are now *assigned* to the 2nd Armored Brigade.

[19.27] Some units (designated with an asterisk on their counters) are assigned to Parent Formations

that never made it to Africa. Except in accordance with Case 19.26, such units may *not* be re-assigned.

[19.28] Only independent units may be assigned to a Parent Formation. No unit assigned to one Parent Formation may be assigned to another, except as noted in Case 19.26.

Remember: Assigned units take up "space" in a Parent Unit's TOE, regardless of where they are. Even if not attached, an assigned unit occupies its allotted space in the Parent Unit's TOE.

[19.3] FORMATION ORGANIZATION CHART
(see Charts and Tables)

The Formation Organization Chart lists the assignment limitations of "normal" units of divisional and brigade level. The maximum number of assigned units of each type that make up the units normal organizational structure are listed. A number of units have singular organizational structures, as noted on the OA Chart; such units are limited by those strictures, and not by any listed on the Formation Organization Chart.

[19.31] **Allied Formation Organization Chart** (see Charts and Tables)

[19.32] **Italian Formation Organization Chart** (see Charts and Tables)

[19.33] **German Formation Organization Chart** (see Charts and Tables)

[19.4] RESTRICTIONS ON ATTACHMENT AND DETACHMENT

Any units assigned to a particular Parent Formation may freely be attached to or detached from that Parent Formation. Most Parent Formations may have some number of additional non-assigned units of certain types, over and above their assignment limits, attached to them. These attachment limits are listed on the Maximum Attachments Chart (19.5). Non-assigned units may also be substituted for "missing" assigned units (Case 19.45).

[19.41] A unit assigned but not attached to a Parent Formation may become attached to that Parent Formation at any time so long as both units are in the same hex, at a cost of one Capability Point each to both the subsidiary unit and the Parent Formation. The counter representing the attached unit is removed from the map. Note that moving such a unit into the hex with the Parent Formation (or *vice versa) and* immediately attaching it would have no effect upon the Stacking Point value of the Parent Formation (unless if it was a Shell; see Case 9.26).

[19.42] A unit not assigned to a Parent Formation in the same hex may be attached to that Parent Formation subject to the restrictions of Cases 19.4 and 19.5 (if applicable) at a cost of two Capability Points for both units during the owning Player's Reorganization Segment, only. Note that the unit would have to be moved into the hex containing the Parent Formation (or *vice versa*) during an earlier Movement Segment, subject to all stacking restrictions.

[19.43] A unit assigned and attached to a particular Parent Formation may be detached from that Parent Formation at any time at a cost of one Capability Point to both units.

[19.44] A unit attached but not assigned to a Parent Formation may be detached from that Parent Formation only during the owning Player's Reorganization Segment or Movement Segment at a cost of one Capability Point each to both units. However, note that units are moved individually or as a stack, and once stopped, can be

moved no further. Thus, if a unit is detached from a Parent Formation during a Movement Segment, movement of either the detached unit or Parent Formation must cease (unless they are moved on as a stack).

[19.45] A unit(s) may be attached to a Parent Formation that has fewer units assigned to it than the maximum restrictions listed on the Formation Organization Chart (19.3) as a substitute for the "missing" (that is, not in the games, or re-assigned as per Case 19.66) unit(s). Such a unit must not exceed, in its own organizational structure, the maximum limits that would apply to the missing assigned unit it is being substituted for. **Example:** If one infantry brigade assigned to a Commonwealth infantry division were eliminated, the Commonwealth Player could attach an independent infantry brigade to that division as a substitute. He could *not*, however, attach an infantry brigade to which more than three infantry battalions were assigned as a substitute, since that unit would exceed the applicable Formation Organization limits.

[19.46] A unit attached to a Parent Formation which is itself in turn attached to a larger Parent Formation is considered attached to the larger Parent Formation also. **Note:** This requirement may render it impossible (unless detachments are made) to attach a certain unit to a Parent Formation because other units attached to the first unit cannot be fitted into the Parent Formation's organizational structure. **Exception:** Units attached to a Parent Formation in turn attached to a larger Parent Formation in accordance with Case 19.45 do *not* count as being attached to the larger Parent Formation.

[19.47] Any units currently attached to a Parent Formation may be detached in such a way that they end up attached to one another at a cost of only the Capability Points required for detachment.

For example, the 132nd Regimente Corazzate and the Nizza Cavelleria Regiment are detached from the Ariete Division. The N.C. Rgt. may be attached to the 132nd R.C. at this point without any additional expenditures.

[19.5] MAXIMUM ATTACHMENT CHART
(see Charts and Tables)

The limits listed on this chart apply to all units of the indicated size and type, regardless of whether or not the unit's organization is "standard" (i.e., whether it appears on the Formation Organiztion Chart, 19.3) or not.

[19.6] REBUILDING DEPLETED UNITS

The method of replacing TOE Strength Points and/or Rebuilding units is covered in Replacements (Case 20.4). It should be pointed out here, however, that no unit may ever be rebuilt or augmented to the point that it exceeds its printed ID Code Maximum TOE Strength. **Example:** The Italian Light Tank battalions may never have more than *nine* TOE Strength Points of Tanks. (Whether these can be Light and/or Medium is covered in Case 19.64).

There are some cases, albeit rare, where the arriving TOE Strength is below the "paper" strength of the unit. This fact is usually listed in the TOE & Weapon System(s) section for that unit, and the Players may increase these units accordingly.

[19.61] Units that have been depleted (reduced) by combat, attrition, etc., may be augmented by Replacements (see Case 20.4). No unit may ever be increased above its stated maximum TOE Strength Level (listed in the OA Chart for that unit).

[19.62] Units that have been *completely* eliminated because of attrition on combat—not breakdown (i.e., no TOE Strength Points remaining) may not be rebuilt. However, HQ units that have lost *all* their *assigned* battalions may have new battalions *assigned* (up to the number listed on the OA Chart) as long as the HQ unit exists as a cadre.

[19.63] If a HQ unit (counter) is eliminated, it may not be rebuilt unless at least 50% of its assigned units still exist and are not attached to other units. In such case, two Infantry Replacement Points may be used to revive the HQ. Otherwise it is gone for good.

[19.64] The use of Replacement Points is covered in Case 20.4. However, the following principles apply in using Replacement Points to rebuild units:

a. Infantry Replacement Points may be used to rebuild a wide variety of Infantry-type units, as well as HQ and Engineer units;

b. Artillery units may be rebuilt with any type of artillery guns. (Commonwealth Players may want, for historical purposes to limit their Medium Regiments to their Medium Guns and Field Regiments to their Field Guns, etc., but this is not a rule.)

c. Tanks may be assigned to any Tank Battalion/Regiment. (Historically, the Commonwealth used a system of I- or Infantry-tanks, Cruiser Tanks, and Light Tanks. Historians familiar with this might want to follow this system; it is really unimportant on an Operational Level. The Italians used a similar system that is easier to discern.)

d. Creation of Heavy Weapons Points requires the expenditure of Infantry Replacement Points and Gun Replacement Points.

[19.65] Armored Recce and Armored Car units use Recce points, usually, to rebuild. However, the Players may wish to use their Light Tanks to augment Recce units (see Case 20.6).

[19.66] In an instance where a battalion assigned to a Parent Formation has either been eliminated entirely or has, for any reason, been *assigned* to another Formation, the assigned "space" for that battalion may be taken by another, previously unassigned, battalion. The latter battalion is then considered assigned to the new Parent, although it was not previously so. **Example:** The 42nd RTR of the 1st Army Tank Brigade is destroyed completely. The Commonwealth Player may *assign*, say, the 7th RTR to fill its place, even though the 7th RTR would not normally be allowed to be assigned to the 1st Army Tank Brigade. (It would be allowed to "switch" under Case 19.26).

[19.67] The HQ unit for a Parent Formation is, for play purposes, its Cadre. As long as the HQ exists, that Parent Formation may be rebuilt by or Reassignments. If the HQ is eliminated, see Case 19.62 and 19.63.

[19.68] Rebuilding units takes place in the Organization Phase only; it may not take place at any other time. For every two Replacement TOE Strength Points added to a unit, that unit (and its parent, if such is the situation) uses *one* Capability Point. A unit *may* earn Disorganization Points by taking on a large number of Replacement Points in an Operations Stage. Severely depleted units a Player wishes to so refit should be first moved to rear areas.

[19.7] AXIS BATTLE GROUPS

[19.71] The Germans — and to some extent the Italians — have the ability to form Battle Groups (*Kampfgruppen*) out of *ad hoc* units or from units from other divisions and brigades. The Germans

did this quite often, molding individual Battle Groups to fit an occasion. Therefore, at any time during an Organization Phase (and only then), the Axis Player may form Battle Groups with his units. All units must be in the same hex in the Organization Phase, and they must conform to Stacking Restrictions and the limits listed in the following Cases. Battle Group counters are provided to give HQ support. (These Battle Groups are given historical names, but can be used in any fashion.)

[19.72] A German Battle Group can carry a maximum of *four* battalion sized units of any type, but there may be no more than one tank battalion and/or two infantry battalions. Up to two additional *companies* may be attached over this limit.

[19.73] The Italians also formed Battle Groups, but on a limited basis. No actual counters are provided, but the Italian Player, if he wishes, may form Battle Groups using the list of Battle Groups on the Italian OA Sheet. Italian Battle Groups may have a maximum of three battalion-sized units, only two of which may be infantry and only one of which may be armor. One company-sized unit may be attached. No more than two Italian Battle Groups may be in existence at one time.

[19.8] FORMING AD HOC AXIS ANTI-TANK BATTERIES

The Axis Player may use his Anti-Tank Gun Replacement Points (his Marders will be especially useful) to form "ad hoc" units; i.e., new units not in the game. Essentially, he will be forming batteries of from 3 to 6 TOE Strength Points of any one AT gun.

[19.81] The Axis Player's Brigade-Level HQ units (including Kampfgruppe) bearing an infantry-type symbol may contain up to six TOE Strength Points of anti-tank guns.

[19.82] The Axis Player may augment any Brigade-Level HQ at any point in the game with Anti-tank TOE Strength Points if, at that point in time, all of his anti-tank units on the map (which includes the Tripoli-Tunisia boxes for this purpose) are at at least 67% of their maximum permitted TOE Strength.

[19.83] The augmentation is performed by assigning anti-tank Replacement TOE Strength Points to the HQ as if the HQ is an anti-tank unit. The initial assignment must be at least three TOE Strength Points.

[19.84] The assigned Anti-Tank Replacement Points are trained at the Gun Replacement Point rate.

[19.85] An HQ that contains Anti-Tank TOE Strength Points possesses a CPA equal to that of those Anti-Tank Points.

[19.86] The Axis Player may only assign a single type of anti-tank guns to a particular HQ (if they are eliminated completely he may begin again with any type of anti-tank gun). Note that captured anti-tank guns cannot be used to augment.

[19.87] An augmented HQ retains a Stacking Point value of zero *regardless* of the number of AT points it currently contains.

[19.9] AUGMENTING COMMONWEALTH BATTALIONS WITH ANTI-TANK

[19.91] Starting with the 75th Game-Turn (April 1, 1942), the Commonwealth Player may increase the capabilities of certain of his infantry battalions by giving them TOE Strength Points of Anti-Tank guns.

[19.92] Only those infantry battalions possessing a CPA Rating of 10 (whether or not they were historically motorized; i.e., CPA Rating of 10+)

and Offensive/Defense Close Assault Ratings of either 1/2 or 2/2 may be so augmented.

[19.93] These infantry unit's characteristics change to now permit the unit to contain a second weapons system (i.e., Anti-Tank TOE Strength Points).

[19.94] Each historically motorized infantry battalion (CPA of 10 +) may contain 2 TOE Strength Points of anti-tank guns. Each historically non-motorized infantry battalion (CPA of 10) may contain one TOE Strength Point of Anti-Tank guns.

[19.95] The Anti-Tank Points are assigned to the infantry unit as regular Gun Replacement Points. They undergo training at the Gun Replacement Point rate.

[19.96] No Anti-Tank TOE Strength Points may be so assigned if, at that point in time, any anti-tank regiment assigned to the infantry battalions parent unit(s) is not at maximum TOE Strength.

[19.97] Once the Anti-Tank Points have been absorbed by the infantry unit they possess the CPA of that infantry unit (i.e., a CPA of 10 if the infantry are walking or a CPA of 20 or 25 if the infantry are motorized).

[19.98] Anti-Tank TOE Strength Points do not affect any shell determinations of the infantry unit.

[20.0] REINFORCEMENTS, REPLACEMENTS AND COMMONWEALTH WITHDRAWALS

GENERAL RULE:

Both sides receive Reinforcements and Replacements. Reinforcements are entire units; Replacements are TOE Strength Points of particular Classes. Both Players receive Reinforcements according to the schedule listed on the Reinforcement Track. In addition, the Commonwealth Player receives Replacements according to Commonwealth Production, and the Axis Player receives Replacements more or less at his whim out of the Axis Replacement Pool.

Important: Any Replacement die rolls may be kept secret from the other Players (including other members of your own team).

CASES:

[20.1] REINFORCEMENTS

[20.11] Reinforcements are new, whole units that arrive as specified by the Reinforcement Track. Thus, in the September 3/2, Operations Stage, the Commonwealth Player receives the 6th New Zealand Brigade (and its three battalions) as well as the 6th NZ Field Artillery Regiment.

[20.12] Reinforcements enter the game at the beginning of the Naval Convoy Arrival Phase of the Operations Stage. There is no Capability Point cost for debarking; arriving units *may* be moved in the first Operations Stage of arrival. (The arrival dates have been adjusted to account for the logistical problems of debarking, etc.) Units do *not* pay a Capability Point cost for the first hex they are placed in.

[20.13] Reinforcements are treated as any other units as soon as they have arrived, and they may perform any and all game functions normally.

[20.14] Commonwealth reinforcements, unless noted below, arrive at Cairo. Layforce Commando unit (Game-Turn 19) and the Tiger Convoy (Game-Turn 32) of Tank Replacement Points

(which are *reinforcements*) arrive in Alexandria. Returning withdrawn units arrive at Cairo or Alexandria at the Commonwealth Player's option (subject to stacking restrictions).

[20.15] All Axis reinforcements arrive in Tripoli, However, if there are no Commonwealth land combat units west of Mersa Matruh (inclusive) then the Asis Player may divert forces to Benghazi. The Axis Player may bring in one battalion-equivalent combat unit or two company-equivalent combat units and up to ten Truck (or Motorization) Points assigned to arrive with that unit (or its parent unit). The Axis Player may not divert units to Benghazi if this will exceed stacking restrictions or if Benghazi has worse than a Level three efficiency at that point in time. This use of Benghazi does affect its port capacity for that Operations Stage (see Case 55.1).

[20.2] REPLACEMENT POINTS

Replacement Points are designated by Class as follows: Infantry Points, Gun Points, Tank Points, and Recce Points. Replacement Points usually enter the game for Axis Replacement Points only — at the option of the Axis Player from the Axis Replacement Points Pool (see Case 20.6), or — for the Commonwealth Player only — in accordance with the Commonwealth Production System (see Case 20.7). All Replacement Points, regardless of the method in which they enter the game, are covered by the same restrictions as listed in this Case.

[20.21] All Replacement Points "arrive" in the Naval Convoy Arrival Phase of an Operations Stage. Replacement Points mandated by the Reinforcement Track arrive in a particular Stage of a particular Game-Turn as designated. Replacement Points from the Axis Replacement Points Pool arrive in a particular Stage as determined by the Axis Player; however, he must plan such arrivals two full Game-Turns in advance (see Case 20.6). Replacement Points from Commonwealth Production also arrive in particular Stages as determined by the Commonwealth Player; these must be determined four Game-Turns in advance (see Case 20.7).

[20.22] Commonwealth Replacement Points may be—rarely—listed on the Reinforcement Track. They are designated by type (e.g., the Commonwealth Player will receive "27 points of Matildes," not merely "27 points of tanks").

[20.23] Replacement Points that are available in the Axis Replacement Pool are designated by type only. He is limited as to how many points of each type may be brought in during any one turn. See the Axis Replacement Pool.

[20.24] Similarly, Replacement Points available according to the Commonwealth Production System are designated by type and limited as to availability.

[20.3] REPLACEMENT POINT CONVERSION CHART
(see Charts and Tables)

[20.4] HOW REPLACEMENT POINTS ARE USED

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INF
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[20.41] Trained Replacement Points may be assigned to (and absorbed by) a unit any place on the game-map (even in an Enemy Zone of Control). However, the Replacement Point and the receiving unit must be in the same hex. This means that "Mohammed usually goes to the Mountain," rather than the latter. Points must be assigned for eventual delivery to specific units immediately

upon arrival. Should the designated unit be eliminated, or withdrawn, such points must be reassigned immediately.

[20.42] Counters are provided to represent the Replacement Points. Replacement Point counters have all the characteristics of an actual unit, with several major exceptions:

a. They may never voluntarily enter an Enemy Zone of Control unless the hex is occupied by a Friendly unit;

b. They may never be used in any type of combat other than defending against Close Assault, regardless of the strategic or tactical situation;

c. They all have a Basic Morale of −3 (in their unabsorbed state);

d. They may *never* exceed their Capability Point Allowance (which is that of the unit they are being assigned to); if they ever exceed their CPA — for any reason — they are considered to have a Cohesion Level of −26.

[20.43] Replacement Points (both Axis and Commonwealth) are required to undergo Training. They must train for a specific number of Operations Stages, which may include the Stage of arrival. Players should consult the rules on Training (17.3) for particulars, as the same rules that apply to Training Reinforcements apply to Replacements. Axis points train in Tripoli or any major city. Commonwealth units train in those locations listed in Case 17.32. When in doubt as to unit size, five Replacement Points equals one battalion. The schedule for Replacement Training is as follows:

Type of Replacement Point	OpStages of Training
Gun Replacement	One (Actually, not Training; more uncrating)
Infantry Replacement	Three
Tank, AC, Recce Replacement	Six

Note: This has nothing to do with Commonwealth training for Morale.

[20.44] In essence, within the parameters of Case 20.42, Trained Infantry Replacement Points are usually trucked (if available) to the Front Line after undergoing Training, where they are transferred to the unit of assignation. Trained Tank, Gun and Recce Replacement Points may move on their own, use Railroads (Commonwealth), etc.

[20.45] Like other normal units, Replacement Points require Stores and Fuel (if vehicles) when moving. Remember, five Replacement Points is the equivalent of a battalion for all purposes. They can be assigned ammunition, but this is pretty much a waste of supplies, given the maxims of Case 20.42.

[20.46] Replacement Points moving toward the Front for purposes of assignment are considered Truck Convoys and move only in the Truck Convoy Movement Phase.

[20.47] Players should use the Replacement Point Availability and Assignment Sheets for keeping track of what is happening with their Replacement Points.

[20.48] The cost in Capability Points to attach Replacement Points to units is listed on the Capability Point Cost Summary (6.3) Replacement Point units are considered as Assigned units for this purpose.

[20.49] Replacement Points may be absorbed only during the Reorganization Segment. They then acquire the assigned unit's cohesion, breakdown and other levels.

[20.5] UPGRADING ARMORED CAR EFFECTIVENESS

At the beginning of the campaign, most Armored Car and Reconnaissance (Recce) units were "light" in nature, using lightly armored cars, carriers, and AP trucks mostly equipped with anti-personnel weapons. As the war progressed, this equipment was often upgraded with the addition of light tanks and better-armed cars and carriers. This rule reflects that increase in effectiveness.

[20.51] All armored reconnaissance and armored car (i.e., Italian ID Code "ww," German ID Code "gg" and Commonwealth ID Code "hh" thru "tt" inclusive) units that arrive/deploy with an Anti-armor Rating of zero (even those also possessing an Offensive Close Assault Rating of "3" — see Case 20.54) may be increased in effectiveness with the following exception. None of the Commonwealth Player's Recce units assigned to Infantry *Divisions* (for this purpose, the 18th Brigade of the 7th Australian Division is considered a division) may be upgraded (i.e., the 51st Recce Regiment of the 51st Highland division could not be upgraded).

[20.52] To upgrade an Armored Recce or A/C unit, the Player simply adds one TOE Strength Point of certain types of tanks (as listed in 20.53) to the Recce or A/C units, remembering that the unit may never exceed its stated TOE maximum. Thus, he may add the TOE to replace a lost TOE Point, or he may simply add the Tank TOE in and *not* increase the TOE Strength Points, if the Recce or A/C unit is already at maximum level.

[20.53] Commonwealth Players may use *Stuarts* to upgrade their Recce/AC units. German units may be upgraded by adding *Pz II* TOE points. Italian units may be upgraded by adding M/11 or L6/40 Tank Points, or armored recce/armored car Replacement Points.

[20.54] An "upgraded" Recce or A/C unit's TOE Strength Point has an Anti-Armor Rating of 1, instead of zero, and an Offensive Close Assault Rating of 3, instead of 2.

[20.55] No units may be upgraded until 1/39, at the earliest.

[20.6] AXIS PLANNED REPLACEMENTS

Italian and German Replacement Points enter the game from the Axis Replacement Pool (20.66) as a result of direct planning by the Axis Player.

[20.61] In the Axis Replacement Pool, the Axis Player will find the maximum number of Replacement Points for each type of point for the entire Campaign Game. (Each Scenario lists the maximum available for that Scenario, if any). The Axis Player may never use more Replacement Points than are provided. This is further limited by the maximum points available per turn, per type.

[20.62] The Axis Player may bring in *any* number of Replacement Points of any and all Classes during any one OpStage (see Case 20.23) limited of course by the pool restrictions. However, each Replacement Point is counted against the Shipping Tonnage allowance for that Game-Turn (see Case 51.5). The equivalent tonnage of each Point is given in the Pool Table. Thus, if the Axis Player wishes to bring in 10 Italian Infantry Replacement Points, he would need 350 Tons of Shipping availability.

[20.63] All Axis Replacement Points coming from the Axis Replacement Pool must be Planned for at least two turns in advance. In other words, Axis Planned Replacements for July, 1941 must be determined in the Naval Convoy Arrival Phase of the 1/III Game-Turn of June, 1941. Replacement planned in June III may arrive in any OP Stage Naval Convoy Arrival Phase of July I.

[20.64] Replacement Points have priority in Shipping Space over any type of supplies. The Axis Logistics Commander thus has to keep a close watch (and tight rein) on what he is shipping at what time, as he rarely knows that far in advance exactly how much shipping he will have available (see Section 51.0). Remember, Axis Shipping is subject to Commonwealth air Raid, so keep an eye on Malta and the location of Commonwealth air-fields.

[20.65] Replacement Points may not be absorbed by units that have no place for them, so remember to space your Replacements carefully.

[20.66] **The Axis Replacement Pool Table** (see Charts and Tables)

[20.67] **Axis Replacement Point Type Limitations Chart** (see Charts and Tables)

[20.7] COMMONWEALTH PRODUCTION

[20.71] Most Commonwealth units and some of their Replacements arrive via the Reinforcement Track. However, most Replacements — mostly "drafts" and transport — arrive somewhat randomly as mandated by the Commonwealth Production Tables (20.78).

[20.72] The Commonwealth Player must plan *two* months in advance (unless specified in a given Scenario) for the arrival of Replacement Points via Production. Thus, for Points required for August, 1942, the Commonwealth Player must plan — using the Production Systems — in the first Naval Convoy Schedule Phase of July, 1942. However, the Commonwealth Player always uses the Production Table for the month (one months in the future) in which he wishes his units to arrive — not the month in which he is consulting it.

[20.73] The Commonwealth Production System functions like the Axis Pools except for Infantry and Truck Points. The Player uses a random dice roll to determine what Infantry and Truck Points he receives per turn, depending upon the date of arrival.

[20.74] Replacement Points scheduled for any given turn must be divided among the OpStages as evenly as possible. This refers to the total Points for *all* types. Thus the Commonwealth Player may bring 10 Medium Trucks in one OpStage and 10 Infantry Points in the next.

[20.75] Replacement Points listed in the Reinforcement Schedule arrive *in addition* to any Production. The Commonwealth Player has no Shipping Problems; his Replacement Points simply arrive.

[20.76] All Planned Replacements arrive in any hex in Cairo or Alexandria. They, like other Replacements, must undergo Training (see Case 20.43).

[20.77] The Commonwealth Player may "upgrade" his Infantry units in much the same fashion as his Recce/AC units. This applies only to infantry units with a 1/2 (Off/Def) Close Assault Rating. The Commonwealth Player simply uses *one* Infantry Replacement Point for each TOE Strength Point in the unit he wishes to upgrade. Furthermore, the Commonwealth Player must upgrade *all* TOE Points in that unit at the same time. The Replacement Point used is absorbed to increase the Assault Rating to 2/2; it does not increase the TOE Strength itself. No upgrading may take place before the July 1/I, 1942 Game-Turn, which means they may be "planned" in June, 1942. Infantry Replacement Points scheduled for upgrading need not be Trained. Once upgraded additional replacements assigned to that unit only require 1 Infantry Replacement Point per TOE Point, not 2 (1&1) Infantry Replacement Points.

[20.78] **Commonwealth Production System** (see Charts and Tables)

[20.8] COMMONWEALTH MANDATORY WITHDRAWALS

During the Desert Campaign, Commonwealth units were often withdrawn and sent elsewhere (Crete, Greece, Syria, Iraq, Cyprus, Sudan, etc.). This is reflected in the Commonwealth Reinforcement Schedule, which tells the Commonwealth Player if, when, and how many units must be removed from the game.

[20.81] Withdrawals are listed in the Reinforcement Schedule. They are listed as either actual units or as types of units (e.g., "Withdraw any two Armor Brigades").

[20.82] When a Withdrawal is listed by type, the unit chosen for Withdrawl must be at 75% maximum TOE Strength (at least), or, if no units are up to that level, the highest TOE Strength-level unit of its type available.

[20.83] Units to be Withdrawn must be moved to Cairo or Alexandria on or before the Game-Turn or Stage they are to be withdrawn. If they are not present or at required TOE Strength (20.75) by that time, they are eliminated. (This is a play mechanism to forestall procrastination.) Units so eliminated may not return (as many Withdrawls do, later in the game).

[20.84] Once the units have reached Cairo or Alexandria, they are simply removed from play.

[20.85] If a unit scheduled for Mandatory Withdrawal is less than 75% TOE Strength, it must be brought up to that level by Replacement Points *before* Withdrawal Date (see Case 20.82) or an equivalent substitute unit of similar type that is at least at 75% TOE strength.

[20.9] VOLUNTARY COMMONWEALTH WITHDRAWALS

Throughout the Campaign, the Commonwealth was under great military and political pressure to support a wide variety of activities in such places as Cyprus, Sudan, Iraq, etc. Case 20.8 discusses large *mandatory* troop withdrawals. In addition, the Commonwealth, during lulls in action, would often send several *ad hoc* battalions to duty elsewhere; these units often shuffled back and forth in almost random fashion, dependent on the situation. It would be folly to list all such movements and even sillier to require a Player to follow them. (We are not too happy with Mandatory Withdrawals, but such unit absences on a large scale must be accounted for.) The Commonwealth Player therefore has the option to withdraw small forces at any time, thereby gaining Victory Points. Victory Points are given because these forces would aid campaigns elsewhere, put additional pressure on the enemy, etc. Returning voluntarily withdrawn units penalizes the Commonwealth Player. See the Campaign Game Victory Conditions.

[21.0] BREAKDOWN

COMMENTARY:

The great problem with the desert was not really the heat, which was bad enough. The major problem was the incredible wear and tear that vehicles incurred. The desert got into everything, and this deadly combination of heat, sand, and rocky ground wreaked havoc on all moving parts. Tanks used to going 1000 miles without an overhaul would collapse after one day's hard travel. The rules for Breakdown and Repair attempt to simulate this facet of the Desert Campaign. Like many other rules in *CNA*, Breakdown requires working with a lot of numbers. The rule itself is

simple; it is the record-keeping that will tax the imagination (and patience). Sheets for Breakdown and Repairs are provided.

GENERAL RULE:

Essentially, all vehicles, except motorcycles and those vehicles assigned (abstractly) to gun units (Artillery, Anti-Tank, AA/Flak, etc.) are subject to Breakdown. Whether a given unit will break down depends on the distance traveled and the type of terrain encountered in a given Operations Stage. Furthermore, certain types of vehicles break down faster than others, and this is taken into account. In general, each type of terrain has a Breakdown Factor, and for each hex entered during movement the moving vehicle accumulates Breakdown Points. When the unit ceases movement, the Player totals the Breakdown Points accumulated, consults the Breakdown Table, adjusts the Breakdown Point Column for vehicle type, and rolls two dice, adding them together. The result is the percentage of vehicles (of a given type) in that unit that have Broken down. Broken down vehicles may not move, defend or attack. They are represented by Broken down Unit Counters. Broken down units may be captured (by the Enemy) or retrieved (by the owning Player). Either way, Broken down vehicles may be Towed back to a Repair Facility for Maintenance, or they may be Repaired in the Field (see Section 22.0 for Repairs).

CASES

[21.1] WHICH UNITS BREAKDOWN

[21.11] Only the following vehicles are subject to Breakdown: Truck Points, tank, armored reconnaissance/armored car and self-propelled gun TOE Strength Points whether they comprise part of a unit or are Replacement Points.

[21.12] Each specific type of TOE Strength Point has its own *Breakdown Adjustment Rating* (BAR). BAR's are listed below and in the various Tank & Gun Characteristics Charts. For example, an Italian M 13/40 has a BAR of 2R while the Commonwealth Sherman has a BAR of zero.

[21.13] The Breakdown Adjustment Rating is used to adjust the Breakdown Points column to the left or right when rolling to determine Breakdown.

[21.14] Breakdown Adjustment Summary

Type of Point	Breakdown Adjustment Rating
All Trucks	2 Left
All Armored Car ArmRecce	1 Left
SP Guns	1 Left, 2 Right*
Tanks	1 Left, 2 Right*

*Listed individually on the appropriate Tank & Gun Characteristics Chart.

[21.15] Vehicles are never required to check for Breakdown when moving to, from or amongst the Axis off-map Tripoli/Tunisia boxes.

[21.2] WHEN BREAKDOWN OCCURS

[21.21] Each hex (or rather the terrain in the hex) possesses a Breakdown Point Value, which is listed on the Terrain Effects Chart (8.37). In addition, certain types of hexsides (e.g., Wadis) also have a Breakdown Point Value. The Breakdown Point Value is the number of Breakdown Points a motorized unit or vehicle accumulates when moving into that type of terrain/hex and/or through that type of hexside. Breakdown Point Values for given terrain types may be modified by Weather (see Section 29.0).

[21.22] Combat does not cause Breakdown, although *any* movement (Retreat, Reaction, etc.) does accumulate Breakdown Points.

[21.23] As a vehicle or motorized unit (see Case 21.11) moves, it accumulates Breakdown Points. All of the vehicles/motorized units in a stack or Parent formation accumulate the Breakdown Points for given terrain. **Example:**
(see bottom of this page)

[21.24] *Whenever* a vehicular or motorized unit ceases movement — whether it has finished its Movement for that Operations Stage or will be moving again under the Continual Movement Rule — the owning Player *must* check for possible Breakdown.

[21.25] All Breakdown Points garnered by a unit during a given Operations Stage are accumulated until the end of that Stage. Simply because a Player checks for Breakdown for a unit does not mean those Breakdown Points accumulated up to that point are discharged; they continue to accumulate up until the end of the Stage (see Case 21.26). In other words, Breakdown Points are cumulative within an Operations Stage — and they are cumulative and applicable during *both* Players' portions of the Operations Stage.

[21.26] If a unit has had a Breakdown check during an Operations Stage (regardless of whether or not it actually suffered any Breakdown), it is required to check for Breakdown again *only* if it has accumulated enough Breakdown Points to carry over into the next highest Breakdown Point Column on the Breakdown Table (21.38). **Example:** The LII (M) Battalion (in Case 21.23) had accumulated 15 Breakdown Points the first time it moved. During the same Operations Stage it moves again, but it moves only one hex, accumulating 2 more Breakdown Points for a total of 17. As it is still in the same column (21-30; because M/13's adjust +1 columns higher because of their Breakdown Adjustment Rating), it need not check for Breakdown when it stops. However, in the same Operations Stage, but in the opposing Player's movement, the LII retreats, accumulating 10 more Breakdown Points, for a total of 27. As it is now in a new (higher) column, the unit must check again for Breakdown. A unit does not check for each column; it checks only when it stops, *if* it is in a higher column. **Note:** the Breakdown Rate is virtually geometrically progressive — the further you move the worse it gets. The Player *is* penalized for moving, stopping, moving, stopping, etc.

[21.27] A unit does not check for Breakdown until it has accumulated *more than threee* Breakdown Points, regardless of that unit's Breakdown Adjustment Rating.

[21.28] Breakdown is determined *separately* for each *type* of unit: Trucks, Tanks (including S.P. Guns), or Armored Recce and A/C vehicles. Furthermore, if there are tanks and/or Guns

within a stack/Parent formation with differing Breakdown Adjustment Ratings the Player checks separately for each group of tanks andGuns with a different Rating. A different Breakdown diceroll is used for each separate type.

[21.29] **Important:** In addition to Case 21.28, Players must check separately for each type of unit in a stack that is in a different Breakdown Point column. **Example:** A Recce unit moves and accumulates 15 Breakdown Points, entering a hex with a second Recce unit (which has not moved), Recce #1 continues to move along with Recce #2, both units picking up 23 more Breakdown Points. Recce #1 has accumulated 38 Breakdown Points, Recce #2, 23. Recce #1 and Recce #2 determine their Breakdown separately, because they are using different Breakdown Point columns.

[21.3] HOW BREAKDOWN IS DETERMINED

[21.31] To determine Breakdown, the Breakdown Table (21.38) is used. Each column on the Breakdown Table corresponds to a Range of Breakdown Points accumulated. Thus 31-40 means anywhere from 31 to 40 Breakdown Points accumulated at the time of Breakdown check (all fractions are rounded up: 20.5 = 21). The Breakdown Table uses two dice, read sequentially.

[21.32] After the Player checking for Breakdown notes the Breakdown Points accumulated for a given unit, he takes into effect any Breakdown Adjustment Rating (21.13) as well as any adjustments to Breakdown Rates because of Weather (see Case 21.37). These two are cumulative: a 2 column left Breakdown Adjustment Rating plus a one-column-higher shift for Weather makes for a final adjustment of one column lower.

[21.33] Units accumulating more than 71 Breakdown Points use the 71 + column. You cannot adjust higher than that column, and that column is considered as one column for purposes of adjustment. Units that have their column adjusted lower than the 4-10 column do not suffer Breakdown. Remember the adjustments are in columns, *not* in points accumulated.

[21.34] Having determined the Breakdown Column, the Player throws two dice, reading sequentially , and cross-referencing that diceroll with the Breakdown Column. The result is the percentage of *TOE Strength Points* Broken down within the units for which the Player is rolling (remember Cases 21.28 and 21.29). Each Truck Point is equivalent to a TOE Strength Point for this purpose. (Remember that it is the TOE Strength Points that break down, not the units.) **Example:** A stack with 30 Truck Points and 20 TOE Strength Points of Crusader I's accumulates 35 Breakdown Points and stops. The Player checks for Breakdown. The Trucks have a Breakdown Adjustment
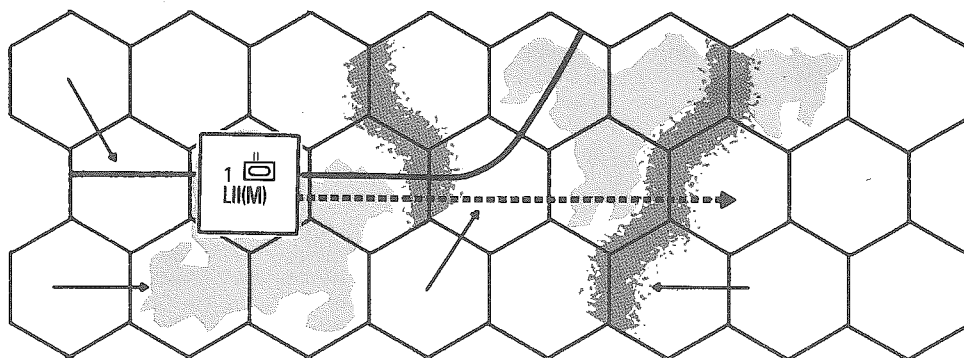
In the above example, the Italian LII (M) Tank Battalion — containing, for example's sake, all M/13's — has accumulated 15 Breakdown Points for the illustrated movement: ½ Breakdown Point

for each of the two Road hexes (it was using Road Movement), 8 for entering the Rough terrain hex, 2 for crossing the Ridge hexside and 4 for entering the Clear Terrain hex.

Rating of 2L, and the Weather is Hot, so the 31-40 column is adjusted one lower (-2 and $+1$ $= -1$). The Player rolls a 33, consults the 21-30 column and sees that 10% of his Truck Points (or 3 Truck Points) have Broken down. He then checks for his Crusaders: they have a Breakdown Adjustment Rating of 1R, plus 1 more for the Hot Weather, adjusting the 31-40 column up to the 51-60 column. The Player rolls a 61, and 33% (or 1/3) of his Crusader I's — or 7 TOE Strength Points — have Broken down.

[21.35] All Breakdown fractions are rounded *up,* (as the 6.7 Tank TOE Strength Points in Case 21.34 became 7). **Exception:** If the Player is checking for a unit that has only *one* TOE Strength Point, all percentage results of 10% are ignored.

[21.36] All breakdowns *must* be distributed as evenly as possible amongst types of vehicles as well as different units. Thus, if two German Panzer battalions, each with different types of tanks (*all* German tanks have a Breakdown Adjustment Rating of zero) suffers 25% Breakdown, the Breakdown must be distributed proportionally as to all types of tanks and between the different Panzer battalions.

[21.37] Weather affects the Breakdown Rates/Columns as follows (consult also Section 29.0):

a. *Normal Weather:* No Effect.

b. *Hot Weather:* For each Breakdown check, adjust one column higher (1R).

c. *Rainstorms:* All Road Breakdown Point Values are treated as Track Breakdown Point Values.

d. *Sandstorms:* If at least 50% of a unit's Movement (calculated in Capability Points expended) in a particular Movement Phases, Retreat, Reaction, etc., is on a game-map with Sandstorms adjust the Breakdown column one higher (1R).

[21.38] Breakdown Table
(see Charts and Tables)

[21.4] BROKEN DOWN VEHICLES
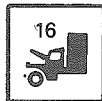
[21.41] Breakdown occurs (for the sake of simplicity) in the hex in which the units checking for Breakdown have ceased movement. However, if a unit checking for Breakdown *started* its movement within two hexes (with no Friendly units, Friendly ZOC's; or impassable intervening terrain) of an Enemy combat unit *larger than* a single battalion, then at least 50% of all TOE Strength Points that Break down must be placed in the hex in which that unit began movement.

[21.42] When Breakdown occurs, the Player places a Broken Down Vehicle marker in the hex in which the Breakdown has occurred and records the necessary information on his Broken Down Vehicles Sheet. Broken Down Vehicle Markers are numbered so that the Player may keep track of what is represented by each different marker.

[21.43] When a Truck Breaks down, its cargo stays with it, unless there are sufficient empty Trucks to pick up the slack. Players will note that a Motorized Infantry battalion that loses even one Truck Point that it cannot replace will become "un-motorized" because of the rule that the entire battalion (all TOE Strength Points) must be in trucks for the unit to be considered motorized.

[21.44] Broken down vehicles have no Capability Point Allowance, nor may they participate in combat of any type. Broken down vehicles may be captured (by the Enemy) — see Case 21.5 — or retrieved by the owning Player (see Towing, Case 21.6).

[21.45] Supplies on broken down Trucks may be transferred to working Trucks in the same hex at the time of Breakdown at a cost of 2 Capability Points (the same as to load/unload). Infantry TOE Strength Points in broken down trucks may "dismount" (1 CP) from the trucks and start walking. *Any* Capability Points they have accumulated while *in* a Truck count against their non-motorized Allowance of 10 (or 8), with the exception that if they have used more than 10 (or 8) while motorized they are considered to have used only that 10 (or 8) — not more. If the men and/or supplies are to be picked up by Truck Points that were not attached to the unit which broke down at the time of Breakdown, there *is* a Capability Point cost for Loading.

[21.5] CAPTURING BROKEN DOWN VEHICLES

[21.51] Broken down vehicles may be captured by the Enemy. Players should differentiate between the capture of Broken down vehicles and (1) the capture of *Destroyed* Tanks (see Case 14.5); as well as (2) the Capture of *abandoned* vehicles.

[21.52] At *any* time during movement, if a Friendly combat unit of battalion-size or larger moves adjacent to a Broken Down Vehicle marker that vehicle (or vehicles) is captured.

[21.53] Broken down vehicles that are either stacked with Friendly combat units, HQs, or Engineers, or in a Friendly-controlled hex may *not* be Captured.

[21.54] The capturing unit and the broken down vehicle must be adjacent through passable terrain; i.e., a German Panzer battalion at the bottom of an Escarpment could not capture Enemy Broken down tanks at the top of the escarpment because the German tanks cannot move across and up an escarpment hexside.

[21.55] Captured Broken down vehicles may be placed (towed) a maximum of three hexes in any direction at the instant of capture. The path of this placement, which costs *no* Capability Points to any unit involved, may not be traced through Enemy units, Enemy Zones of Control or non-passable terrain. (Units being towed are considered vehicles). **Note:** The capturing unit does not expend any Capability Points for this activity, and may indeed continue to be moved.

[21.6] TOWING

[21.61] All vehicles scheduled for repairs at a Repair Facility — including Broken down vehicles and destroyed tanks, whether retrieved by the Friendly Player or captured by the Enemy Player — may be towed to a Repair Facility in order to undergo repairs.

[21.62] Only vehicles *not* undergoing Field Repair (or any other type of repair) may be towed. All towing occurs in the Repair Stage, except for instances such as Case 21.55.

[21.63] There are no towing vehicles (however, see 22.6 and 22.7). Rather, each Broken Down Vehicle marker or Destroyed Tank marker may move 10 Capability Points per Repair Phase. They may move only in the Repair Phase, and they may not React or Retreat Before Combat, etc. The marker is towed as though it is a Medium Truck.

[21.64] No vehicle may ever be towed if it is in an Enemy-controlled hex with the exception of towing at the instant of capture (see Cases 21.55 and 14.53). This restriction applies at *all* times during the Repair Phase. Friendly units negate Enemy Zones of Control.

[21.65] Towing incurs no costs for Fuel, Stores or Water. Towed vehicles do not undergo Breakdown.

[21.66] A Broken down vehicle that unsuccessfully undergoes Field Repairs may not be Towed in that Repair Phase.

[21.67] Broken down vehicles and destroyed tanks must be towed towards the nearest Temporary or Major Repair Facility, if they are being towed.

[22.0] REPAIR

GENERAL RULE:

Broken down vehicles and destroyed tanks may be Repaired and returned to action. Repairs may be undertaken in the field or at Temporary or Major Repair Facilities. Vehicle repair expends supplies.

PROCEDURE:

Vehicles may undergo Repair in the Repair Phase of the Operations Stage. The Phasing Player rolls one die for each type of vehicle he wishes to Repair and checks the variety of Repair Schedules, dependent upon the type of unit, the type of Repair (Breakdown or Destroyed Tanks) and the type of Facility. The dieroll results in the number of TOE Strength Points repaired (Field Repairs) *or* a percentage of the units which are successfully repaired (Facility Repairs). As Repairs are attempted, supplies are expended, whether the repairs are successful or not. Repaired vehicles are returned to play in the form of Truck Points or Replacement Points — for Tanks and Recce units — (see Case 20.2).

CASES:

[22.1] WHICH VEHICLES MAY BE REPAIRED

[22.11] A Player may attempt to repair all Broken down vehicles as well as any tanks destroyed in combat, whether they are his nationality or not. The only requirement is that he control the vehicles in question.

[22.12] All repairs are undertaken in the Repair Phase of each Operations Stage. Only the Phasing Player undertakes repairs.

[22.13] Repairs may not take place under the following circumstances:

a. If the vehicles to be Repaired are in an Enemy-controlled hex, regardless of the presence of Friendly units in the hex. The only exception to this is if the vehicles are in a Major Repair Facility, in which case the presence of an Enemy Zone of Control has no effect; or

b. If there are no supplies available for Repairs (see Cases 22.2 and 22.3); or

c. The vehicles have been towed during the Repair Phase; or

d. The Weather is Rainstorm or Sandstorm for that hex. This does not apply to Major Repair Facilities.

[22.14] The Commonwealth Player may repair all his vehicles together (within the further restrictions below). However, the Axis Player must repair German vehicles separately from Italian vehicles. Captured vehicles are also repaired separately.

[22.2] FIELD REPAIRS

[22.21] Players may attempt to repair Broken down vehicles in the field. Destroyed tanks may not be repaired in the field; they *must* be towed to a Facility (exceptions: see Cases 22.6 and 22.7).

[22.22] Field Repairs may take place in *any* hex in which there is a Broken down vehicle stacked with a Friendly unit of *any* type, even a Squadron Ground Support Unit (see Case 22.13a). Field

Repairs may not be made if the vehicle in question has been towed in that Repair Phase (see also Case 22.6).

[22.23] To repair trucks in the field, the Player rolls one die for Broken down trucks in the hex in question. If he rolls a 2 he may repair one Light or one Medium Truck Point. If he rolls a 1 he may repair two Light or two Medium Trucks (or any combination of Light and Medium equal to two) *or* one Heavy Truck. Field repair of Trucks requires *no* expenditure of supplies.

[22.24] To field repair armored cars and/or Recce TOE Strength Points, the Player rolls one die for all the A/C's and Recce points in the hex. If he rolls a 1 he may repair one such TOE Strength Point. No supply expenditure is required for field repair of Armored Recce or Armored car points.

[22.25] To field repair tanks or self-propelled artillery the Player consults the Broken Down Vehicle Repair Table (22.8) under the column for "Field Repair." He throws one die for *each type* of tank undergoing repairs. Thus, it the German Player has PzII's and PzIV Specials in the same hex, he rolls once for the PzII's and once for the PzIV Specials. The result is the percentage of tanks of that type in that hex that have been repaired. All fractions are rounded up, unless there is only one TOE point undergoing repair. In such case the Player ignores the 10% result.

[22.26] For *each tank* TOE Strength Point to undergo field repairs, the Player must have present in the hex and expend *before* rolling for repairs *one* Fuel Point. He may attempt to repair only those Tank TOE Strength Points he has expended Fuel for.

[22.27] Weather affects Field Repairs; see Case 22.13d.

[22.28] Players will note that field repairs are a risky proposition.

[22.3] FACILITY REPAIRS

[22.31] There are two types of Repair Facilities: Temporary Facilities and Major Facilities. Temporary Facilities may be constructed by the Players (see Case 24.8), and those in existence at the start of a scenario are designated in that scenario. Major Repair Facilities are found in Tripoli (the Tripoli Box), Tobruk (for whoever controls it), Alexandria and Cairo (all hexes). The effectiveness of Repair facilities may be reduced or neutralized by bombing (see Cases 22.35 and 39.37) and Artillery Barrage.

[22.32] If a Broken down Vehicle or Destroyed Tank beings a Maintenance Segment in a hex with a Repair Facility *and* that vehicle has not been Towed during that Operations Stage such vehicle(s) may undergo Repairs.

[22.33] Players Repair by type of vehicle: Truck Points, Recce/AC Points, Brokendown Tanks and Guns by Type, and/or Destroyed Tanks by Type.

[22.34] For each type of *Brokendown vehicle* the Player rolls one die and consults the Broken Down Vehicle Repair Table (22.8) under the correct column (Temporary or Major Facility). The dieroll may be modified by the effects of bombing on the Fortification Level of the city (see Case 22.35). The result of the dieroll is the percentage of that type of vehicle that may be Repaired (see Case 22.25 for details). See Case 22.4 for Destroyed Tanks.

a. If the Repair Facility is in a Major City and the Enemy Player succeeds in reducing the Fortification Level of that City by *one* (see Air Bombardment Table) add one to the dieroll. If the level is reduced by two or three add two to the dieroll

(whether reduced by Air Bombardment and/or Barrage).

b. If the Repair Facility is not in a Major City and the Enemy Player delivers enough Air Bombs or Artillery Barrage that, when/if using Air Bombardment Table, to reduce a Fortification one Level, that Repair Facility is neutralized for that OpStage. It may not repair any vehicles.

[22.35] For *each* Truck Point, Gun or Tank TOE Strength Point undergoing repair the Player must have present in that hex and expend (before rolling for Repairs) *one* Store Point and *one* Fuel Point. He may attempt to repair only those points he has expended supplies for.

[22.36] Temporary Repair Facilities may be affected by Weather (see Case 22.13d). Major Facilities are never affected by Weather.

[22.37] If a *Temporary* Repair Facility is in the ZOC of an Enemy unit it may not be used for Repairs unless it is in a Major City. Major Repair Facilities may be used when in Enemy ZOC's.

[22.38] See Case 24.8 for how to construct a Temporary Facility.

[22.4] REPAIRING DESTROYED TANKS

Destroyed tanks — represented by Destroyed Tank markers — may be repaired and put back into service. Players may repair any destroyed tanks — theirs or the other player's — that they can get to a Repair Facility. See Case 14.5.

[22.41] Destroyed tanks may be repaired only in Repair Facilities. Destroyed tanks may not be repaired in the field. However, see Cases 22.6 and 22.7.

[22.42] For each and every destroyed tank TOE Strength Point a Player wishes to attempt to repair, he must expend two Stores and two Fuel Points (Logistics Game only). These supplies must be present in the hex and *all* such supplies must be expended *before* any repair attempts are resolved. *I.e.,* before rolling the die for any repair attempts, the Player must decide how many attempts he will make and "pre-pay" for them. Supplies must be expended for all attempts regardless of whether they are successful or not. (Note that this is not the case with repairing aircraft.)

[22.43] In order to attempt to repair a Tank TOE Strength Point, the owning Player rolls one die and consults the Destroyed Tank Repair Table (see Case 22.44). The die must be rolled separately for each such tank TOE Strength Point. If the attempt is successful, the TOE Strength Point is considered repaired; if unsuccessful, it is either considered permanently eliminated ("junked") or nothing happens, in which case another repair attempt may be made.

[22.44] Destroyed Tank Repair Table
(see Charts and Tables)

[22.5] REPAIRED VEHICLES

Repaired vehicles are treated as Replacement Points for that type of unit. See Case 20.2. They must have fuel to move again, and they follow all the rules laid down for Replacement Points, except that they do *not* have to undergo Training.

[22.6] THE DESERT TANK DELIVERY ORGANIZATION

The Commonwealth had special Tank Delivery Squadrons which were used to speed up the recovery, repair and training of Tank Units. In addition, they held any Reserves available.

[22.61] The Commonwealth Player receives, over the course of the game, three Tank Delivery Squadrons, which comprise the Desert Tank Delivery Organization (a name, not a HQ unit).

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[22.62] Each Tank Delivery Squadron counter is a sort of "advanced" Field Repair Facility. If a *Brokendown* Tank is in the same hex as a Tank Delivery Squadron the Commonwealth Player may subtract *one* from his dieroll for Field Repair (22.2). For *Destroyed* Commonwealth Tanks, TDS's repair on a die roll of "1". They do not "junk" and they may not repair Enemy tanks.

[22.63] Each Tank Delivery Squadron has *no* combat ratings of any type (see Case 22.64) and has no Stacking Points. They have a CPA of 25 as vehicles but may never voluntarily exceed that CPA or move into an Enemy Zone of Control. If alone in a hex and an Enemy combat unit places the TDS in its ZOC the TDS is eliminated. An eliminated TDS may be returned to play *eight Game-Turns* after its elimination.

[22.64] Each TDS may hold up to *three* TOE Strength Points of Tanks as Reserves and still maintain a Stacking Point value of "0". These Reserve TOE Tank Points are treated the same as any Tank Replacement Points.

[22.65] In addition to the above capabilities, DTS's may Tow Brokendown or Destroyed Tanks back to a Facility at a movement rate of 20 CP's' (as opposed to the normal 10 for towing). DTS's may tow up to three TOE's of tanks (in addition to any Reserves); it still has a Stacking Point Value of "0". DTS's *may not* attempt Field Repair in a turn in which they tow.

[22.66] TDS's that have, for any reason, exceeded their CPA in a given OpStage may not attempt repairs in the ensuing OpStage. They may still tow.

[22.7] GERMAN MOBILE TANK REPAIR SQUAD

The German Mobile Tank Repair Squad is treated exactly the same as the Commonwealth Desert Tank Delivery Squadrpons, with the exception that they may repair only German Tanks (not Italian or captured Commonwealth). There is *one* German Mobile Tank Repair Squad counter.

[22.8] BROKEN DOWN VEHICLE REPAIR TABLE
(see Charts and Tables)

[23.0] ENGINEERS

GENERAL RULE:

In *CNA* Engineer units are used to aid in construction of a variety of items, as well as helping to repair facilities that have been destroyed. They are also useful in laying and removing minefields. Realistically, engineers had a great deal more usage than we have given them in this simulation. However, we have abstracted a goodly number of those uses, as the "thesis" of the simulation does not lie in the direction of Engineer capability. There are three types of Engineer units: Engineer Battalions, Engineer companies, and Headquarters Units with Engineer capability.

CASES:

[23.1] ENGINEER UNITS

[23.11] Engineer counters have no real combat value, nor do they exert Zones of Control. They are not combat units in any way, shape, or form. Engineer units may never enter Enemy-controlled hexes voluntarily, and they may use their parenthesized strength only if they are stacked with a Friendly combat unit.

[23.12] Engineer units may be replaced even if eliminated. Engineer units are rebuilt according to the schedule in Case 20.3.

[23.13] The Commonwealth has two units of the New Zealand RR Construction Battalion. These are used *solely* for the construction and repair of Railroads. The 1S.A. Road Construction unit is used solely for Road work.

[23.14] Headquarters units with a letter E next to their Stacking Points have Engineering capability (see Section 24.0) but otherwise they are treated like any other HQ unit.

[23.2] USES OF ENGINEERS

[23.21] The cost for a unit that is stacked with any Engineer unit (or HQ unit with Engineering capability) to enter an *Enemy* Minefield is reduced to six CP's for Motorized units and three CP's for non-motorized units (see Terrain Effects Chart, Case 8.37).

[23.22] If an Engineer unit or a HQ with Engineer capability remains in an Enemy Minefield hex for an entire Operations Stage without expending *any* CP's, that Minefield is removed at the end of the Operations Stage.

[23.23] Engineer units and HQ's with Engineer capability may help to build fortifications, rebuild fortifications and bombed roads, build, rebuild and dismantle Temporary Repair Facilities, and build and rebuild Railroads and Air Facilities (see Section 24.0).

[23.24] If an unpinned Engineer *Battalion* or HQs with Engineer capability is *attached* to units mounting a Close Assault against units in a fortified hex (*not* a Major City hex), the Assault Differential column may be adjusted one in favor of the assaulting units.

[23.25] In addition to the above, Engineers and HQ's with Engineer capability have a variety of minor capabilities spread throughout the rules. Moreover, most of the above rules are covered in other Sections (e.g., Minefields).

[23.26] Engineer units may not build or destroy 'bridges' (i.e., River/wadi crossings) nor affect escarpments.

[24.0] CONSTRUCTION

GENERAL RULE:

Fortifications, minefields, air facilities, repair facilities, roads, railroads and supply dumps all come into existence (for the most part) through construction. Construction entails the use of manpower under the leadership of Engineers, along with the expenditure of time and supplies. Construction occurs in the Construction Segment of the Organization Phase (within the Operations Stage), and it may be affected by weather. Units involved in construction may not expend any Capability Points during an Operations Stage; otherwise that construction is halted.

CASES:

[24.1] HOW CONSTRUCTION WORKS

[24.11] All construction is initiated and undertaken in the Construction Segment of the Organization Phase within each Operations Stage. Construction is always completed at the beginning of the Construction Segment of a succeeding Operations Stage, depending on how long the construction takes. The number of Operations Stages required to complete construction are listed on the Construction Chart (24.17). These Operations Stages include the Operations Stage in which construction is started.

[24.12] If units involved in construction expend *any* Capability Points during the Operations Stage construction is *halted* and that Operations Stage does *not* count towards Construction. Units involved in construction do not affect Road/Track Stacking Limits.

[24.13] In order to complete construction of a given item the Player must have the necessary supplies on hand in the hex and actually expend them (listed on the Construction Table and described in the following Cases). Such supplies must begin the Construction Segment in the given hex; they are expended during the Construction Segment (even if the units involved in construction are later forced to move or fight).

[24.14] In addition to supplies expended for construction, *units* involved in construction expend all normal supplies as required (Stores, Fuel, etc.)

[24.15] No more than one project may be under construction by a given unit at any one time, and units involved in construction are subject to all stacking rules.

[24.16] A unit may always voluntarily cease construction without any penalty other than that construction is halted.

[24.17] **Construction Chart**
   (see Charts and Tables)

[24.18] **Demolition Chart**
   (see Charts and Tables)

[24.2] ADVERSE EFFECTS ON CONSTRUCTION

[24.21] During Hot Weather each construction site requires the expenditure of 10 Water Points in addition to any other requirements.

[24.22] No construction may occur in a hex affected by a sandstorm or a rainstorm. This does not stop construction entirely; it only prohibits that Operations Stage from counting towards construction time costs. However, if a unit involved in construction leaves a hex during a sandstorm or rainstorm, construction is considered to have stopped completely and must start over again from the beginning.

[24.23] Units pinned by artillery fire or air bombardment may not engage in construction. The effects of this Case are similar to those of Case 24.22.

[24.24] The presence of Friendly units not engaged in construction has no effect on the process of Construction. Remember the stacking limits, however.

[24.3] CONSTRUCTING MINEFIELDS

[24.31] Minefields may be constructed by any Engineering unit (or Commonwealth HQ Engineers). Engineers may construct regular minefields and/or dummy minefields. The minefield counters indicate whether the minefield is real or dummy on the reverse sides of the counter.

[24.32] A minefield requires one full Operations Stage to construct (lay), regardless of whether it is a dummy or an actual minefield. Thus, a minefield started at the beginning of one Operations Stage will be completed by the beginning of the Construction Segment of the next Operations Stage.

[24.33] In order to lay a regular minefield the Player must have an Engineering unit, 15 Store Points and 15 Ammunition Points in the hex. These supplies are expended at the start of construction. To indicate a minefield under construction, place an Under Construction marker in the hex.

[24.34] A dummy minefield is constructed in the same way as a regular minefield, except that the Player expends no Ammunition Points and only three Stores Points.

[24.35] Minefields may be constructed in clear, sand/gravel, or rough hexes. Only one Minefield (real or dummy) may be constructed in any one hex. Minefields may *not* be constructed in major cities.

[24.36] Minefields may not be constructed in Enemy-controlled hexes.

[24.37] See Section 26.0 for the effects of Minefields.

[24.38] If an Engineer unit or HQ unit with Engineering capability spends an entire Operations Stage in a hex with a real minefield (Enemy or Friendly), that Minefield is removed (see Case 23.22). Dummy minefields are removed upon revelation of their status.

[24.4] CONSTRUCTING FORTIFICATIONS

[24.41] Fortifications are strongly protected defensive emplacements requiring the laying of cement-work, etc. Fortifications are represented by counters as being either Level 1 or Level 2. In additions, major cities have built-in Fortification Levels which may be rebuilt by Engineer units when they are destroyed.

[24.42] In order to construct *one Level* of fortification, a Player needs one unit (of any size) with Engineering capability *plus* one Infantry battalion with three or more TOE Strength Points. These units must spend three complete Construction Segments in the hex under Construction (indicated by an Under Construction marker) without expending any Capability Points. At the beginning of the fourth Construction Segment, the Fortification Level is complete, and a Fortification Level counter (with the correct level indicated) is placed in the hex.

[24.43] In addition to Case 24.42, the Player must have present at the beginning of Construction 30 Stores Points. These Stores are then expended and Construction begins.

[24.44] Construction of *new* fortifications may take place in any hex except mountain, salt marsh, desert, major city, and delta. Fortifications may not be build from scratch in an Enemy Zone of Control.

[24.45] Fortification Levels — as well as Levels of major cities — that have been destroyed by air bombardment or artillery barrage may be rebuilt, using the same guidelines as in Cases 24.42 and 24.43. The major difference is that the *re*building (or repairing) of fortifications *may* take place in an Enemy Zone of Control.

[24.46] *No* other construction — of any type — may take place in a hex which is undergoing fortification construction.

[24.47] Once emplaced, fortifications may not be voluntarily removed. They may be reduced only by air bombardment or artillery barrage. No other type of combat affects fortifications, although fortifications affect combat (see Section 25.0).

[24.48] Fortifications may be built or rebuilt *one* Level at a time. Levels of a major city may not be built or rebuilt above their original Level of two, with the exception of Alexandria and Cairo, which are Level 3 cities.

[24.5] ROAD CONSTRUCTION

The Via Balbia is the major — actually the only — road that runs through North Africa. It provides the sole communications link and is of vital impor-

tance to both Players. At the beginning of the war, several sections of the Via Balbia were incomplete or in such a state of disrepair as to be nonexistent. Such stretches are noted on the game-map as *unfinished roads*. In addition, there is a similar stretch on game-map B that avoids the coastal port of Derna. This is the Derna Bypass, built by the Axis to avoid Allied coastal shelling by off-shore bombardment. Finally, the track running between Mersa Matruh and Siwa was tarred over and converted to a road by the 1st SA Road Construction Battalion. All unfinished road sections may be built by construction; *any* road hexes bombed and destroyed may be rebuilt.

[24.51] Only those sections of road that appear as unfinished road hexes (see Terrain Key on map) may be built into actual road hexes. Neither Player may invent new stretches of road. Any road hex (actual) that has been destroyed by bombing may be rebuilt by construction.

[24.52] Unfinished road hexes and destroyed road hexes (noted by markers for destroyed roads) are treated as tracks for all purposes.

[24.53] There are several ways to Build or Rebuild Road hexes:

a. Any Infantry Battalion of 3 TOE Strength Points or more may build or rebuild *one* road hex per Construction Stage; or

b. Any Engineer *company* or HQ with Engineering capability may build or rebuild *one* road hex per Construction Segment; or

c. Any Engineer battalion alone, or any Engineer company/HQ *plus* 3 TOE Infantry unit may build or rebuild *three* road hexes per Construction Segment. The three hexes include the hex the units are in plus any two road hexes adjacent to that hex.

[24.54] For *each* road hex to be built or rebuilt the Player must expend at the beginning of the Construction Segment *two* Stores Points that are in the same hex as the constructing units.

[24.55] No Enemy-controlled road hex may be built or rebuilt.

[24.56] The Player may use an *End of Road* marker to indicate how far construction of new road has extended. When an entire stretch is finished, Players should simply note the fact somewhere.

[24.6] BUILDING AND REPAIRING RAILROADS

There are two railroad lines on the game-maps: the rail complex that crisscrosses the Nile Delta and extends towards Mersa Matruh (eventually to be completed at Tobruk) plus a defunct Benghazi-Barce line. The latter has been included for historical purposes only and may never be used for any reason.

[24.61] The only units that may *build* railroads (see Case 8.47) are the two New Zealand railroad construction companies (the 10th and the 13th). The NZRRC companies are considered engineer companies, but they may be used only for RR work. All engineer battalions and companies, including the NZRRC — and Commonwealth (only) HQ with Engineering capabilities — may repair destroyed track.

[24.62] One NZRRC company requires two OpStages to build one hex of new track. Two NZRRC companies in the same hex can build one hex of new track in one OpStage.

[24.63] Each Engineer Unit may *re*build three destroyed railroad hexes per Construction Segment. The unit may rebuild the hex it occupies plus any two hexes adjacent to the Engineer unit.

[24.64] For each Railroad hex to be built *or* rebuilt there must be present with the Engineer unit — and actually expended in the Construction Segment — *one* Store Point.

[24.65] No Enemy-controlled or Enemy-occupied railroad hex may be built or rebuilt.

[24.66] Railroad hexes may be destroyed by air bombardment or artillery barrage. They may also be destroyed by an Engineer unit, a HQ with Engineer capability, or an Infantry unit with three or more TOE Strength Points, if such a unit spends one complete OpStage in the hex to be destroyed without expending any Capability Points. Destroyed railroad hexes are indicated by placing a Destroyed RR Hex marker on the hex in question.

[24.67] The Alexandria-Mersa Matruh-Tobruk line may be constructed in only one specific direction. Construction must start from the last completed hex extending from Mersa Matruh and grow westward towards Tobruk. No hex may be skipped, and a Railhead marker is provided to indicate the extent of construction. Unbuilt railroad hexes simply do not exist; they serve no function until actually built.

[24.7] CONSTRUCTING AIR FACILITIES (Air Game Only)

[24.71] Air facilities include airfields, air landing strips, flying boat basins, and flying boat alighting areas. The use of these is covered in the Air Rules.

[24.72] Airfields and flying boat basins may be constructed only by Engineer battalions. Air landing strips and flying boat alighting areas may be constructed by Engineer battalions, Engineer companies, or Squadron Ground Support Units.

[24.73] Air fields or strips may be constructed in clear terrain, rough, major cities, desert or sand/gravel hexes. They may not be constructed in an Enemy-controlled hex. Flying boat facilities may be constructed only in coastal hexes, regardless of the terrain.

[24.74] Airfields and Flying Boat Basins require three Construction Segments to complete, while air landing strips and flying boat alighting areas require one Construction Segment to complete.

[24.75] The supply requirements for building new air facilities are listed on the Construction Chart (24.17).

[24.76] Air facilities may lose their effectiveness — or rather their capacity to maintain squadrons — or be destroyed entirely through bombing. Air landing strips, and flying boat facilities (both) must be built from scratch if destroyed. Airfields are rebuilt Capacity Level by Capacity Level (see Air Rules, Case 36.12). The cost and time to rebuild one Capacity Level of an airfield is the same as it costs to build an air landing strip. Only one Level may be rebuilt at a time.
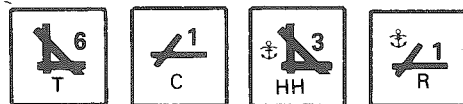
[24.77] Air facilities are represented by counters, each of which is lettered for identification purposes. When an air facility is constructed, the Player simply puts the corresponding counter on the game-map. There are no hexes in which air facilities are printed (except for Case 24.78); they must all be constructed, unless provided by the initial set-up for a scenario.

[24.78] A number of air facilities are, in essence, printed on the game-map. Such facilities do not need air facility counters. Each hex in Cairo is considered an airfield. In addition, air facilities for Malta are printed on the Malta map. There are

also air facilities in the Tripoli-Tunis boxes, Commonwealth off-map bases (such as Deversoir; see map E), Crete, Italy, and Sicily. The use of these facilities is covered in various sections of the Air Rules.

[24.8] CONSTRUCTING REPAIR FACILITIES

[24.81] Only temporary repair facilities may be constructed as new; all major repair facilities are already in existence (see Case 22.31). Both temporary and major repair facilities may have their effectiveness reduced or neutralized by air bombardment and/or artillery barrage. Temporary facilities may be destroyed by the presence of Enemy units; major facilities may not be so destroyed.

[24.82] All Engineer units — *including* HQ's — may build, rebuild or dismantle temporary repair facilities or rebuild major facilities.

[24.83] Construction of a *new* temporary repair facility entails the presence of one Engineer unit of any size for three Construction Segments, along with the expenditure of 250 Store Points and 150 Fuel Points (most of which represent machinery, lubricants, etc.). All supplies must be present at the start of construction and are expended immediately.

[24.84] Repair facilities in major cities that have had their City Levels reduced by bombardment (see Case 22.35) may be rebuilt by first rebuilding the Level of the city (see Case 24.4) and then expending 50 Stores Points and 30 Fuel Points, along with the presence of an Engineer unit spending one Construction Segment in the hex.

[24.85] A temporary repair facility may be built in any major city hex or in any village hex. However, no Player may ever have môre than two temporary repair facilities at any one time.

[24.86] Temporary repair facilities may be *dismantled*. It takes one unit with Engineering capability *one* Construction Segment to dismantle a temporary repair facility. When the facility is dismantled, the Player has 120 Store Points and 25 Fuel Points in that hex. The dismantled facility exists no more, and if a new one is to be built, it must be started from scratch.

[24.87] Temporary repair facilities may not be Constructed in an Enemy-controlled hex. However, all Repair Facilities may be *re*built or dismantled in an Enemy-controlled hex.

[24.88] A temporary repair facility that is in the process of being dismantled may not be used.

[24.9] CONSTRUCTING SUPPLY DUMPS AND DUMMY SUPPLY DUMPS

A supply dump is a place where supplies (in the Land Game, ammo and fuel only) are stored in a quasi-organized fashion (see Case 54.1). A supply dump may be constructed by having any one TOE Strength Point of any type expend three Capability Points and 20 Store Points (Logistics Game only) in a hex. A dummy supply dump may be constructed in a hex with an expenditure of three Capability Points only. That hex may then be designated a supply dump (dummy or not as appropriate).

Note: Supplies may be placed in a hex not containing a constructed supply dump. The only restriction on the use of such supplies is that trucks "in convoy" may not load such supplies. Players should keep track (obviously) of the presence of supplies in a hex with no supply dump. However, there are restrictions on the maximum number of points that may be so deployed—see the Logistics Game.

[25.0] FORTIFICATIONS

GENERAL RULE:

All major cities in the game are considered fortifications. In addition, Players may construct fortifications (see Case 24.4). Fortifications are available in levels, reflective of the depth and strength of the fortifications. Most fortifications and cities have two possible levels, but Cairo and Alexandria have three possible levels. Fortifications give defensive benefits to units in that hex.

CASES:

[25.1] FORTIFICATION LEVELS

[25.11] Each level of Fortification gives an increasing defensive benefit to units in that hex (see T.E.C., Case 8.37).

[25.12] Each major city on the game-map is a Level 2 fortification. Cairo and Alexandria are Level 3 fortifications. Villages are *not* fortifications.

[25.13] Constructed fortifications are either Level 1 or Level 2. Fortifications can never be constructed higher than Level 2, except in Cario or Alexandria. (Fortification counters have two sides, representing each level.)

[25.14] Fortifications may be reduced in Level strength by air bombardment (see Case 39.37) or artillery barrage (Case 12.5). No other type of combat affects fortifications. Reduced fortifications may be rebuilt.

[25.15] Reduced Fortification Levels may affect the rate of repair of a repair facility (see Case 22.35).

[25.16] Major cities and fortifications may be reduced to a Fortification Level of zero. (Note: The "zero" level has no effect in the Land Game, except to mean that the fortification can be more easily rebuilt. However, see the Strafing Table, Case 40.8).

[25.2] EFFECTS OF FORTIFICATIONS

[25.21] Fortifications have no effect on movement or breakdown for any units.

[25.22] The effects on various combat types for a unit defending in a fortified hex are summarized on the Terrain Effects Chart, Case 8.37.

[25.23] Air bombardment and strafing of land units (combat or otherwise), trucks, flak and supply dumps in fortifications is treated the same as artillery barrage in terms of column adjustments, with one exception: air bombardment does *not* affect any of the above items while in a Level 3 City. That city must be reduced to Level 2 for air bombardment to have any effect.

[25.24] *All* units in Level 3 cities ignore *all* pinned results from *any* type of combat.

[26.0] MINEFIELDS

GENERAL RULE:

In no place did the mine receive more notoriety than in the Libyan/Egyptian desert. Used sparingly in the early part of the war, minefields became a standard defensive feature by 1942. By El Alamein, they were ubiquitous. Minefields were more of a hindrance than a danger, at least on an operational level. (On tactical level it's a different question.) Therefore, in *CNA* minefields are obstacles; they rarely cause casualties. Units pay increased Capability Point costs to enter minefields.
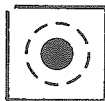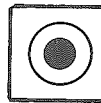
CASES:

[26.1] TYPES OF MINEFIELDS

[26.11] There are two types of minefields: *dummy* and *real*. All minefield counters have the same front side; the reverse side of the counter reveals whether it is real or dummy.

[26.13] Real minefields may be removed by having an Engineer unit — or a unit with Engineer capability — spend one full Operations Stage in the hex (i.e., the Engineer must start the Operations Stage in the hex with the minefield). If it expends no Capability Points on movement and remains in the hex at the end of the Stage, the minefield is removed. This applies to both Friendly and Enemy minefields.

[26.14] Dummy Minefields are removed at the end of any Movement Segment in which an Enemy unit expends the Capability Points to move into that hex (see Case 26.23).

[26.15] A Friendly minefield is flipped over to reveal its type (real or dummy) immediately upon being entered by an Enemy unit.

[26.2] EFFECTS OF MINEFIELDS

[26.21] The movement costs to enter a minefield are in the Terrain Effects Chart, 8.37. It should be pointed out that a motorized unit or vehicle entering an Enemy minefield expends Capability Points proportional to its given Capability Point Allowance. Thus, an artillery unit would expend 15 Capability Points to enter an Enemy minefield.

[26.22] All movement costs are *in addition to* the terrain in the hex. Note: Units without Engineers will expend points far over their CPA.

[26.23] The costs to enter a dummy minefield are the same as those for a real minefield. The only difference is that once a unit enters an Enemy dummy minefield, that minefield is revealed. However, it is not removed until the end of that Movement Phase of the Operations Stage. Thus, any units that move into that dummy minefield in that Phase of Movement still pay the cost to enter a minefield.

[26.24] Engineer units and combat units stacked with an Engineer *battalion* or Commonwealth HQs with Engineering capacity pay only *four* additional Capability Points to enter an *Enemy* minefield, rather than their listed cost. Engineer units and combat units stacked with an Engineer battalion pay *no* extra cost to enter a *Friendly* minefield.

[26.25] Whenever a vehicle (tank, truck, etc.) enters an Enemy minefield *not* accompanied by an Engineer *battalion,* or Commonwealth HQs with Engineering capacity, there is a possibility that the minefield will destroy some of the vehicles. The moving Player rolls *one* die for each battalion-sized (or less) combat unit and/or for all 2nd and 3rd line trucks. If the Player rolls a 5 or 6, the mines have destroyed one TOE Strength Point of tanks or motorized infantry, or one unattached Truck Point.

[26.26] On any anti-tank or close assault combat in which the *attacking* units are in an Enemy minefield or in which there is a Close Assault against an Enemy unit in an Enemy Minefield, the defending Player adjusts all columns *one* in his favor. This does *not* apply to artillery bombardment.

[27.0] DESERT RAIDERS & COMMANDOS

COMMENTARY:

On an operational level, Desert Raiders (The Long Range Desert Group and Die Sonderkommando Almasy) had little effect on the war. However, the designers felt that they would be missed in a simulation of this magnitude — and they do add a lot of fun to the game. Desert Raiders are useful for "annoyance" raids: blowing supply dumps, attacking convoys, etc. A bit of honesty is required for this rule.

CASES:

[27.1] THE LONG RANGE DESERT GROUP

[27.11] The Commonwealth desert raiders consist of two units of the Long Range Desert Group (LRDG). These are represented by two LRDG counters. There may never be more than two LRDG units in play at any one time.

[27.12] LRDG units must be formed from other units, already in play, that have reached their maximum Morale Level through training. Untrained units may never be used to form LRDG's.

[27.13] LRDG's are formed from Recce and Armored Car TOE Strength Points — and only from these type of units. To form an LRDG, the Player, in his Organization Phase, simply removes the TOE Strength Point from the Recce/AC unit and places an LRG unit on the game-map in its place. Once formed, an LRDG unit may *not* return to Recce/AC status.

[27.14] LRDG's have a Capability Point Allowance of *fifty* (50). However, they have no combat ratings and may not engage in normal combat (see Case 27.3). They have *no* Stacking Points.

[27.15] There is no cost in Capability Points to form an LRDG unit.

[27.16] If an LRDG unit is eliminated, a new one may be formed (from that eliminated counter) *four* Game-Turns later. Thus, an LRDG unit eliminated in Operations Stage 2 of the July II Game-Turn would be formed in the Organization Phase of the 3rd Operations Stage of the August II Game-Turn.

[27.2] DIE SONDERKOMMANDO ALMASY

The Axis desert raiders were a small group under the command of Count Laslo von Almasy. DSA operates in the same way — and is formed in the same way — as LRDG units, with two exceptions:

a. There may be only *one* DSA unit in play at any one time.

b. DSA may be formed only from German (not Italian) Armored Recce/AC units.

[27.3] HOW DESERT RAIDERS ARE USED

[27.31] Desert raiders are represented by actual counters. However, for the most part, their movement is "hidden."

[27.32] At the time of initial formation, a desert raider unit is placed on the game-map. After that, its movement is secret: i.e., the owning Player records all movement and location of the unit(s) on a separate piece of paper (against a case of a "Matter of Disbelief Between Gentlemen"). The desert raiders follow all the normal rules of Movement (they are vehicle units, Recce type) except that they are usually not on the game-map.

[27.33] Desert raiders remain hidden until either of the following occurs:

a. They engage in a *raid* (Case 27.5); or

b. They are *spotted* (Case 27.4)

When either one of the above occurs, the desert raider counter is placed on the game-map in the hex in which the event occurred.

[27.34] Desert raiders have no Zone of Control. Furthermore, they do not have to stop when entering an Enemy Zone of Control, although such movement risks being spotted (see Case 27.6). To enter an Enemy-occupied hex is to raid (Case 27.5).

[27.35] Desert raider units need supplies but not the same as normal units. *Once* a week — during a given Game-Turn (not Operations Stage) — they must pass through a Friendly supply dump, oasis or bir (well). As it passes through the supply dump, it picks up (and expends) from the supply dump *one* Ammunition Point and *two* Fuel Points. If such supply is not available, the desert raider unit must wait until it becomes available. It may not travel without those two Fuel Points per Game-Turn. Water is taken on in the same way, but can come from any oasis or bir. If a desert raider has not drawn water by the end of a given Game-Turn, it is eliminated. (Players will note that they can go 5 Operations Stages without resupplying, by getting supplies in Stage 1 of a Game-Turn, then resupplying in Stage 3 of the *following* Game-Turn.

[27.36] If necessary, desert raiders have Reaction capability (see Case 27.44).

[27.37] Raiders may never exceed their 50 point Capability Point Allowance. If for any reason they are forced to do so, they are eliminated.

[27.38] Desert Raiders do not consume fuel (except 27.35) nor do they breakdown.

[27.4] SPOTTING DESERT RAIDERS

[27.41] At *any* time a desert raider enters an Enemy-controlled hex, or at any time an Enemy combat unit enters a hex occupied by a Friendly desert raider, the desert raider may be spotted.

[27.42] Desert raiders may never enter Enemy-occupied hexes unless they are going to raid.

[27.43] If a Raider performs either action listed in Case 27.41, the raider Player must announce the fact and roll *one* die. If he rolls a 6, the raider has been spotted. If a raider unit is spotted, it is eliminated. Any other dieroll has no effect; the raider has not been spotted.

[27.44] If an Enemy unit is moving (and enters the raider hex) it must expend 1 Capability Point to try to spot the raider, even though the Enemy Player knows that the raider is there. In other words, the moving Enemy Player may choose not to go after the raider. A Phasing unit may only try to spot a raider once per Operations Stage.

[27.5] RAIDS

[27.51] The type of raid a desert raider may perform usually depends on the objective. Most raids are "harassment" in nature, as they can cause little real damage (except for Case 27.6). They invariably take place behind Enemy lines.

[27.52] Desert raiders may be used to blow up a *water pipeline*. If a desert raider enters a hex with a water pipeline, and there are no Enemy combat units in that hex the raider may attempt to blow the pipeline. The Player announces the raid, places the raider on the game-map, and rolls one die. If he rolls a 1-4, the pipe is blown; a 5-6 the pipeline is safe. Such a raid may be attempted only once in an Operations Stage. It occurs during Movement and expends *five* Capability Points (the unit may, of course, move after the raid — away from harm).

[27.53] Desert Raiders may attempt to destroy *airfields. (Air landing strips* are immune from raids; they are simply not the type of facility that can be rendered ineffective by desert raiders). If an Enemy airfield has *no* Enemy combat units in that hex, the desert raider may enter the airfield hex, reveal itself, and attempt to cripple the field. The Player rolls *one* die. If he rolls a 1 or 2, the capacity of the airfield is reduced by one level (see Case 36.00). On a dieroll of 3-6, nothing happens. The cost of the Raid is *five* Capability Points, and no casualties are suffered (as there are no Enemy combat units present). The raid may not take place if there *are* Enemy combat units present. (Squadron Ground Support Units of any type are not combat units for this purpose.) An airfield destruction raid may be attempted only once per airfield per Game-Turn. However, it may be combined with a plane destruction raid (see Case 27.54). Airfields in major cities may not be raided.

[27.54] Desert raiders may attempt to destroy Enemy *airplanes* that are on the ground. The planes may be in airfields or air landing strips. (Raiders can have no effect on flying boats or their facilities.) Planes in air facilities that have Enemy combat units in the hex or are in major cities may not be so raided. The raider unit enters the hex, reveals itself and expends five Capability Points. The Player rolls one die. If the result is a 1 or 2, 10% (at least) of all planes in the hex are destroyed, the choice of planes being up to the raiding player. If a 3-6 is rolled, the raid fails. *However,* if the Player rolls a 6, the raider unit is eliminated. This raid may be combined with attempted destruction of an airfield, as long as all Capability Point costs are paid.

[27.55] Raiders may attack *Supply Dumps.* Any dump may be a target, except for dumps in major cities. Unlike other raids, a desert raider *may* attack a guarded dump. The raider unit enters the hex with the dump, reveals itself and expends five Capability Points. Then one of two things can happen:

a. *The Dump has no Enemy combat units:* The Player rolls one die. If he rolls a 1 or 2, 10% of all supplies are destroyed. A 3-6 and the raid fails, and nothing happens.

b. *The Dump is guarded by Enemy combat units:* The raiding player rolls two dice, adding them together. If the total is *higher* than the *Raw* Defensive Assault Strength of the units guarding the dump, the raid is on, and the Player proceeds as in (a) above. However, unlike (a) above, if he rolls a 6, the unit is eliminated. If the total of both dice is *not higher* than the Raw Defensive Strength of the guards, the raider is simply eliminated.

[27.56] After any raiders-guards conflict is resolved, if any raiders survive, and the dump is a dummy that fact must be revealed immediately. The raid is then off, in terms of destroying supplies, but all other results (for guards and elimination) still apply.

[27.57] Desert raiders may attack *unescorted truck convoys* in order to destroy trucks and supplies. This may be done in one of two ways:

a. The Raider enters a hex that has a truck convoy; or

b. The raider uses *interception* (see Case 27.59) during the opposing Player's Convoy Movement Phase.

[27.58] The mechanics of a truck convoy raid are the same regardless of the way it is initiated. The raider expends *five* Capability Points, enters the hex, and the Player rolls one die. If the dieroll is a 1 or 2, one Truck TOE Point (plus cargo) is destroyed. The type of truck (heavy, medium, or light) is up to the "defender;" the type of cargo is

then up to the raider. If the dieroll is 3-6, the raid fails. If *any one* of the trucks is carrying Replacement Points, the raider adds one to the dieroll, and a 6 will result in the elimination of the raider. If *all* the trucks are carrying Replacement Points, the Raider is automatically eliminated, and there are no Truck losses.

[27.59] Raiders may use *interception* to attack truck convoys. If, during a Truck Convoy Movement Phase, a truck convoy passes within *four* Movement Capability Points of a desert raider, the Player who has the raider may halt the convoy and attack it, using the above rules. In such a case the convoy uses five Capability Points (but is not required to exceed its CPA) as does the raider. The raider may then expend up to five additional Capability Points to leave the hex. (Remember, the Raider pays for all Capability Points he uses.)

[27.6] RAID ON ROMMEL

This rule has been included because we felt it would add a bit of fun, although it *is* based on solid historical events.

[27.61] Commonwealth LRDG units may attempt to Assassinate or Capture General Rommel by attempting a *Raid on Rommel.*

[27.62] To perform this raid, the LRDG simply enters the hex which the Rommel counter occupies.

[27.63] The Commonwealth Player rolls *two* dice and consults the Raid on Rommel TAble (27.64). The results of that table are self-explanatory. The cost for such a raid is 10 Capability Points, and if the LRDLG has no Capability Points remaining it is also eliminated.

[27.64] The Commonwealth Player may attempt no more than four Raids on Rommel during the course of a Campaign Game, and only one in any shorter Scenario.

[27.65] If the Commonwealth Player is related to Alistair McLean, Richard Burton, Franchot Tone, or Jack Higgins he adds one to his diceroll. If the Axis Player is an intimate friend of Erich von Stroheim or James Mason, well, that's nice.

[27.7] COMMANDOS: "Layforce"

[27.71] One of the Commando units in the game is: "A" Battalion of the Special Service Brigade (Commonwealth), also known as Layforce because of its Commander: Lt. Col. R.E. Laycock, of the Royal Horse Guards.

[27.72] Layforce "A" Battalion is the same as any other infantry unit with one exception: if Layforce starts an Operations Stage in Alexandria, it may be placed during that Operations Stage in any coastal hex on the game-map (see Case 27.77).

[27.73] Layforce "A" Battalion must spend one full Game-Turn in Alexandria before it can be landed. Such commando landing expends 5 Capability Points from the unit for every 50 hexes moved by the transporting ships in that OpStage, in addition to the cost of terrain in the hex.

[27.74] Layforce "A" Battalion needs no supplies for the first *three* Operations Stages after its landing, including the Stage in which it lands. After that, it must be supplied like any other unit.

[27.75] If Layforce "A" Battalion is being used for a Commando raid, trucks may not be loaded with it.

[27.76] Layforce "A" may take Replacement Points. To replace one lost point requires three Infantry Replacement Points trained for 12 Op-Stages with the Lay Force unit in Alexandria.

[27.77] Layforce *may* be transported by a unit from the Commonwealth Fleet. If such ship (or ships) remain in the coastal hex in which Layforce was landed, then the Layforce battalion may, if necessary, retreat into the ship. Such a retreat satisfies any and all mandated retreats. The Commonwealth Player may also freely embark the Layforce back onto a ship. Once Layforce has been moved into the ship, the ship immediately moves back to Alexandria.

[27.8] COMMANDOS: The Special Air Service Brigade

The Commonwealth Special Air Service Brigade (SAS) was a specially-trained unit whose primary function was the disruption and destruction of Axis air facilities and planes. It was trained to raid by land, sea or air, and in several raids it managed to destroy over 50 Axis planes. As such, the SAS operated closely with the LRDG, which often arranged for transportation of the SAS after its raids.

[27.81] The Special Air Service Brigade is a "battalion-size" infantry unit with a basic Capability Point Allowance of 15 (see the OA Sheets Section 04.46). It may be motorized; however, if being used on a raid where it is transported by air or sea it may not be motorized. The SAS Brigade may operate as a normal infantry unit (a waste) or as a Commando unit.

[27.82] The SAS Brigade raids Enemy airfields. It may raid guarded (with Axis troops) or unguarded facilities. It may complete its raid (and roll for plane destruction) only if there are no Axis combat units in the hex. Thus, if the SAS Brigade raids a facility with Axis combat units, it must either eliminate such units or force such units to retreat in some way. Any such combat is conducted normally.

[27.83] The SAS Brigade may move by land (see Case 27.81). If it does so it moves like any other land combat unit. It may also be transported by any *one* Commonwealth Ship counter and debarked in any coastal hex, at a cost of five Capability Points to the SAS for every 50 Movement Points or fraction thereofused by the ship. It may also be airdropped (see Case 42.4) at a cost of 5 Capability Points to the SAS unit.

[27.84] If the SAS Brigade travels by land, it uses normal supply restrictions and rules. If it is transported by sea or airdropped, it is in supply for three consecutive OpStages. This means that the unit has all the necessary ammunition, water, and stores it needs for those three OpStages (including the one of its transportation). After that, it is on its own.

[27.85] The SAS Brigade may attempt to destroy planes on any Axis Air Facility that has no Axis combat units present at the time the raid is attempted (see Case 27.82). The SAS unit may attempt its raid in any Movement/Combat Segment.

[27.86] To destroy Axis Planes by an SAS raid the Commonwealth Player consults the SAS Raid Table, rolls one die, and removes the resultant percentage of each type and make of plane present (see Case 27.9). The TOE Strength of the SAS Brigade at the time of such raid is irrelevant.

[27.87] Attempting a raid costs the SAS Brigade three Capability Points, in addition to any other Capability Points it may have expended during that OpStage. Only one such raid may be performed per month, and there must be at least six OpStages between raids.

[27.88] The SAS Brigade may move after a raid as far as it wishes, within the parameters of continual movement and cohesion. However, if the Commonwealth Player stacks that SAS Brigade unit with an LRDG unit at any time the SAS Brigade increases its Capability Point Allowance to 30, is removed from "physical sight" (in the fashion of an LRDG unit; see Case 00.00) and moves as an LRDG unit. The LRDG unit must escort the SAS unit to the point where it (the SAS Brigade) is placed on the game-map — i.e., it has returned home.

[27.89] The SAS Brigade may replace eliminated TOE Strength Points, three Infantry Replacement Points trained for a 12 OpStage period for every TOE point needing replacement. If the SAS Brigade is eliminated entirely, it may not be received or replaced in any way.

[27.9] DESERT RAIDER RAIDS TABLES

(see Charts and Tables)

[27.91] Desert Raider Raid Table
(see Charts and Tables)

[27.92] Raid on Rommel Table
(see Charts and Tables)

[27.93] Special Air Service Brigade Raid Table
(see Charts and Tables)

[28.0] PRISONERS

POW
5

GENERAL RULE:

At any time that a unit surrenders, it becomes a prisoner. Every infantry TOE Strength Point becomes one Prisoner Point. Prisoners must be fed, kept in detention, and eventually herded to aDeparture Point for shipment elsewhere. For the latter purposes, guard units may be formed. Prisoners may *not* be massacred; historically, both sides in the African Campaign showed a sense of chivalry and common decency unknown in any other theatre.

CASES:

[28.1] THE CARE AND FEEDING OF PRISONERS

[28.11] Each Infantry TOE Strength Point that Surrenders — not tanks or guns — becomes a Prisoner Point. Prisoner Points are represented by counters, which may be used like "change." They are available as needed.

[28.12] Immediately upon surrendering, all Prisoner Points may be moved up to three hexes in any direction by the capturing Player. They may not enter an Enemy-controlled or Enemy-occupied hex or enter or pass through impassable terrain during that "free" movement.

[28.13] Prisoner Points have a Capability Point Allowance of *eight,* which may be used for movement purposes only. They move in the captor's Convoy Movement Segment. They cannot, of course, engage in combat; their Capability Point Allowance is used for movement only. Prisoners may never exceed their Capability Point Allowance. If their guards are forced to retreat, they stand still.

[28.14] The maximum number of prisoners allowed in any one hex is 40 Points. If there are more than *five* points "standing" (not moving) in a given hex, the Player may put a POW Detention Camp marker in the hex to indicate that prisoners are being held there. Prisoner Point markers always remain on the game-map until they reach their Point of Departure.

[28.15] For every five Prisoner Points in a hex, the capturing Player *must* expend one Store Point per

Operations Stage (not Game-Turn). These Stores are expended before any other stores may be allocated. They need *not* be present; they are subtracted from the nearest supply dump, etc.

[28.16] Prisoners can be dealt with by captors in any fashion they wish, as long as they are fed and kept alive. The best course, however, is to get them off the game-map. To do this they are marched to Departure Points. The Axis Departure Point is the Sirte box on game-map A; for the Commonwealth, the Departure Point for their prisoners is either Alexandria or Cairo. As soon as Prisoner Points enter their Point of Departure they are removed from the game — permanently. (They will not be used in factories to promote *your* war effort.)

[28.17] Each detention camp requires the presence of *one* Guard Point (see Case 28.2). When moving, one Guard Point is requried for each 1 Prisoner Points. Any prisoners without a guard "escape" (see Case 28.23).

[28.18] Prisoners may be transported by trucks, if you are feeling profligate with your transport.

[28.2] GUARDS AND ESCAPES

[28.21] Guards are needed to watch and escort prisoners.

[28.22] Guards may be formed from any infantry-type unit. Simply subtract a TOE Strength Point from the combat unit and replace it with a guard counter. Each Guard Point is an infantry unit worth *one* TOE Strength Point, with assault ratings of 0/1. Guards have a Capability Point Allowance of 10, but they are usually moving at a rate of 8, the same as their prisoners. Guards are capable of combat, reaction, etc. Players should note that if guards react or retreat before combat, their prisoners do *not.* Unused Guard Points may be returned to their unit of origin.

[28.23] If Guards abandon prisoners at *any* time, or there are prisoners in excess of the guard requirements (see Case 28.17), those prisoners *escape.* (There are no organized prison breaks here; this is Africa, not Colditz.)

[28.24] If escaped prisoners are within eight Capability Points of a Friendly unit — not counting Enemy Zones of Control or units — they are placed with that Friendly unit. They are then removed from play and one month later aretreated as Replacement Points, to be brought back for Training, etc. They may not be used to assign or attach to units. If the escapees are farther than eight Capability Points, they may start to move towards Friendly units. All they require is water. If they have water, they survive. For every Operations Stage without water, they lose 10% of their strength, rounded up. They stop moving when they reach a Friendly unit or Friendly major city, or if they are recaptured (an Enemy unit enters their hex). Escapees move in the Truck Convoy Phase. (Players may not escort Prisoners into the deep desert and then remove their guards in order that the escapees will die of thirst before reaching safety.)

[28.25] Escapees have no combat values at all. However, they may never be attacked in any way. Escaped prisoners are automatically recaptured if an Enemy unit is moved into a hex containing just them.

[28.26] The above rules for escapees should be taken *cum grano salis.* They are meant as fun; this is not a game of escape and evasion. Use the rule judiciously and with common sense.

[28.3] CAPTURED EQUIPMENT

Note that captured equipment, unlike prisoners, may be used against their former Player's units, as long as it has been repaired.

[29.0] WEATHER

GENERAL RULE:

"Whether there's weather or no, we must have weather, you know." In any case, weather is determined for each individual Operations Stage. There are four types of weather: normal, hot, sandstorms, and rainstorms. The probability of a given type of weather occuring depends on the season and the area of the game-map. Weather affects movement and breakdown.

CASES:

[29.1] WEATHER DETERMINATION

The Player with initiative rolls two dice and consults the Weather Table (29.6), using the proper row, in terms of season. The dice results are read sequentially. The Weather Table gives the weather for that Operations Stage (e.g., a diceroll of 53 during summer results in Hot Weather).

The Seasons are as follows:

Season	Starts	Ends (inclusive)
Spring	March III	June II
Summer	June III	September II
Fall	September III	December II
Winter	December III	March II

If a "sandstorm" or "rainstorm" result is obtained, the Player consults the Foul Weather Location Table (29.7) and rolls one die. This determines the map sections affected. Unaffected map sections have normal weather. **Note:** Weather never affects Malta, Italy, Sicily, Crete, or Tunesia-Tripoli. Weather effects on map E *do* affect Allied off-map airfields.

[29.2] NORMAL WEATHER

Normal weather in North Africa means hot during the day and cold at night. But, for game purposes, normal weather has no effect on the play of the game. The effects of such weather are already built into the system.

[29.3] HOT WEATHER

[29.31] When hot weather occurs, it occurs on *all* sections of all game-maps.

[29.32] When undergoing construction, the sites, exclusive of the requirements of units there, require water rations (see Case 24.21) in hot weather.

[29.33] When determining Breakdown during hot weather, adjust the Breakdown Column one column higher (to the right), see Case 21.37.

[29.34] If the weather is hot, *all* Fuel and Water Levels (not including water in wells or oases) are reduced by five per-cent (5%). This includes water and fuel in dumps as well as in trucks. However, do not count the water/gas actually being consumed by a unit (in the radiators and gas tanks, as it were.) This is done during the Weather Determination Phase.

[29.35] During hot weather, water requirements for *all* units are *doubled.*

[29.4] SANDSTORMS

Sandstorms are whirling maelstroms of grit and dust, blinding personnel and clogging machinery for days. Visibility falls to zero, and all action comes to a virtual standstill. Most men preferred combat to the raging sandstorms.

[29.41] Sandstorms occur only on certain sections of the game-map, as per the Weather Table (29.6). Regardless of where a sandstorm occurs, it *never* occurs over *delta* hexes (Game-Map E). The Weather for game-maps on which there is no sandstorm is normal.

[29.42] No construction may occur in a hex in which there is a sandstorm (see Case 24.22).

[29.43] No aircraft may fly into or out of a hex with a sandstorm.

[29.44] *All* movement costs for hexes with a sandstorm are *doubled.*

[29.45] If a unit expends 50% or more of its Capability Points for movement in sandstorm hexes during a given Movement Phase, the Player adjusts his Breakdown Point column one higher (to the right) when rolling for breakdown (see Case 21.37).

[29.46] Sandstorms do not extend out into the Mediterranean (they stop in the coastal hexes).

[29.47] Sandstorms may damage Grounded Aircraft (see Case 38.5)

[29.5] RAINSTORMS

Sudden downpours in the desert were a lot more common than is supposed. Aside from the blessing of having water, these rainstorms often wreaked havoc on movement, turning roads into morasses of mud and flooding heretofore empty wadis with swollen — and deep — rivers of rainwater.

[29.51] Rainstorms occur only on certain game-maps; see the Weather Table (29.6). Any game-map that does not have a rainstorm has normal weather.

[29.52] No aircraft may fly into or out of a rainstorm hex. **Note:** Rainstorms do extend to the northern edge of the map; *i.e.,* into the Mediterranean.

[29.53] All depleted wells are filled during a rainstorm.

[29.54] No construction may occur during a rainstorm (see Case 24.22).

[29.55] All wadi hexsides are uncrossable during a rainstorm, except by Roads (see Case 29.56). Players may *not* use wadis to draw water.

[29.56] All road hexes have the same Movement Cost and Breakdown Rate as tracks during rainstorms. Tracks, themselves, remain as tracks, with the exception of Case 29.55.

[29.57] All river hexsides not crossed by roads or railroads are impassable.

[29.58] No vehicle or motorized unit may enter a delta hex, unless it is on a road or railroad. Units in a delta hex at the start of a rainstorm must remain there for that Operations Stage, unless they are on a road or railroad.

[29.6] WEATHER TABLE
(see Charts and Tables)

[29.7] FOUR WEATHER LOCATION TABLE
(see Charts and Tables)

[30.0] THE MEDITERRANEAN FLEET (Commonwealth)

GENERAL RULE:

The Commonwealth Player is supplied with a number of battleships, cruisers and destroyers, which he may use for barrage and anti-aircraft purposes. They may not engage in naval combat (as there is none in the game). The ships — and their usage — are somewhat abstracted, as Naval movement by the British Fleet was extensive and erratic, and records of such are often inaccurate and misleading. Each ship has a Barrage Strength which is equivalent to *Actual* (not Raw) Barrage Points. They may be used to bombard. Ships may be subject to air attack as well as fire from land units. The Axis Player may try to cripple the British fleet with a daring Italian "Chariot" raid. The Italian Navy does not appear in this game; its actions are abstracted into the Axis Convoy Rules (see Section 51.0).

CASES:

[30.1] COMMONWEALTH NAVAL COUNTERS

[30.11] Commonwealth naval units are, in essence, abstracted battleships, cruisers and destroyers. They have been given names (of ships actually in the Med at the time) for identification purposes. However, the British Fleet was never a stable affair, in terms of position, and thus the Naval units represent *types* of ships available, rather than an actual ships.

[30.12] The naval counters have two strength numbers: their Gun Rating and their AA Rating. The Naval Gun Rating is equivalent to *Actual* Barrage Strength Points. The unit's AA/Flak rating is actual AA Points. Thus, the *Queen Elizabeth,* a battleship, has an (initial) Barrage Strength of 6 and an Anti-aircraft strength of 12 AA points.

[30.13] The Gun Rating of a unit/ship also represents its ability to withstand damage. (I said this was abstracted.) Thus, each point of Gun Rating is like a Strength Point. To completely sink a ship, all points of Gun Rating must be elimianted. AA points are reduced in ratio to loss of Gun Points.

[30.14] Naval units have no Stacking Points; they stack freely in any coastal or all-sea hex. They have no effect — in terms of their presence — on land movement, or air movement, or other Naval Movement, Enemy or friendly.

[30.15] Commonwealth Naval units have a Range of 100 sea hexes. This means they may reach any hex within 100 sea hexes of Alexandria (I.e., they may not be placed further West than hexrow xx29 on Map Section 'B'.). They do not actually move; they are simply placed in their hex of assignment at the beginning of a given OpStage.

[30.16] Naval units need no fuel, ammunition, or water within the requirement that they must spend two Operations Stages in Port for every one in action. In addition, no single ship may spend more than three consecutive Op-Stages at sea. (This, in turn, would require six Op-Stages in port.)

[30.17] The Italians do have a ship: The *San Giorgio.* Unfortunately, it has been partially sunk to block the harbor at Tobruk. It operates as if it were an artillery unit, until its removal or complete sinking by enemy engineers. The *San Giorgio* may not move. It may fire into adjacent hexes. It may fire at Commonwealth ships adjacent hexes through sea hexsides.

[30.18] Commonwealth ships may be moved to and from the port of Valetta (Malta). No more than five ships may be in Valetta at any one time. Valetta is a port (like Alexandria) for "recovery" purposes. Ships in Valletta may be moved only to Alexandria. Movement between these ports takes one Op-Stage; it is not considered a turn "at-sea" for purposes of refit.

[30.2] OFF-SHORE BOMBARDMENT

[30.21] Commonwealth ships may bombard any coastal hex they are in. In addition, battleships and heavy cruisers (4-pointers) may bombard any hex adjacent to the coastal hex they are in.

[30.22] Ship Gun Ratings are used as if they were *Actual* Artillery Strength Points, with the exception that they need no ammunition. The Commonwealth Player just considers them as if they

were Artillery units in determining the effect of the naval guns, with one exception: battleships and heavy cruisers firing at 2 hexes distant (see Case 30.21) have their strength halved.

[30.23] To use ships for Off-Shore Bombardment, the Commonwealth Player simply moves the ship from its home Port (which is usually Alexandria) to any hex within Movement Range it wishes to barrage from. **Example:** The British Player wishes to use the *Valiant* (a BB) and the *Ajax* (Heavy Cruiser) to bombard Derna. He places both ships in the Derna hex (00000) in the Commonwealth Fleet Assignment Segment; in any *one* Barrage Step of that Operations Stage they may bombard Derna and any hexes ajdacent to it.

[30.24] Any one ship may use its Barrage Strength only *once* in an Operations Stage; it may not fire repeatedly, like an artillery unit (*e.g.*, in the example in Case 30.23, the Commonwealth Player could fire twice, once with each ship). However, the Barrage Step that the ships fire in is up to the Commonwealth Player.

[30.25] If a Commonwealth ship engages in Off-Shore Bombardment, it *must* spend the next two Operations Stages in Alexandria. This requirement has nothing to do with a ship firing anti-aircraft guns at Enemy planes.

[30.3] ATTACKING SHIPS AND THEIR REPAIR

[30.31] Ships may be damaged by airbombardment (see Case 39.3), Coastal Guns (Case 30.36), or, in a special case, an Italian Chariot Raid (Case 30.4).

[30.32] Enemy bombers, fighter bombers, and torpedo-carrying planes may bomb a ship counter in an effort to damage the ship, reduce its Gun Rating, and put it out of action. Planes bomb ships when they are in the same hex.

[30.33] Bombing ships is a mission; a plane must be assigned to such mission in order to attack the ship. Even if it is in the same hex but is not assigned to bomb the ship it may not attack the ship. See Cases 41.3 and 41.7 for Ship Bombardment.

[30.34] Damage on ships is taken in Gun Rating Points. The Air Bombardment Table gives the number of Damage Points in Gun Rating Points lost as a result of that mission. The Gun Rating of such ship is reduced accordingly. Thus, if the *Ajax* (a 4) were to suffer two Damage points, it would now have a Gun Rating of two (and an AA Rating of 4). Players should keep track of the Gun Ratings and Damage Levels of ships on their Ship Assignment Sheet. Ships always fire with their reduced (if any) Gun and AA Ratings.

[30.35] Artillery units (with Vulnerability Ratings of 6 or more) and emplaced guns may be used against Enemy ships in the same hex as the artillery unit. The Player simply notes that the artillery is firing against the ships (separately from any Air Bombardment). Such artillery may not fire that Stage against land units. The Player takes the total *Raw* Artillery Points firing (not actual) and halves that total. He then uses the Air Bombardment Table, using the Artillery Points as if they were Bomb Points. *Emplaced* Guns (those Guns with a zero CPA) do *not* halve their Raw Points.

[30.36] If a ship's Gun Rating falls to *less than* 50% of its Face Value, it may not leave Port until it has been repaired to better than 50% of its value. If a ship's entire Gun Ratings have been eliminated, it is sunk (and unrepairable).

[30.37] To *repair* one Gun Rating level, a Ship must stay in Alexandria for *six* consecutive Operations Stages. No engineer is needed, and no supplies are expended. If the ship moves before the six Stages are finished, all work must start again.

[30.38] Ships may *always* fire as anti-aircraft guns regardless of where they are or what else they are doing — even repair.

[30.39] The *San Giorgio* may fire at Commonwealth ships using its gun rating as Bombardment Points. See Case 30.35.

[30.4] THE ITALIAN 10TH LIGHT FLOTILLA: Chariot Raids

In one of the most daring raids of the war, six men of the Italian 10th Light Flotilla, piloting slow-speed torpedoes called "Chariots" (or, affectionately, "Pigs"), slipped through the defense nets of Alexandria harbor on the night of 18 December, 1941 and extensively damaged the *Valiant,* the *Queen Elizabeth* and two other ships, thoroughly crippling the British Fleet in the Eastern Mediterranean. The following rule simulates this remarkable feat of daring and courage.

[30.41] Starting in July of 1941, the Axis Player may attempt a "chariot" raid on Alexandria. His object: to damage Commonwealth shipping.

[30.42] The raid must be planned two weeks (six Operation Stages) in advance. The raid actually occurs on the seventh Operations Stage following the Stage in which it is planned. The Axis Player simply notes on a piece of paper the date of the plan of the raid and its execution.

[30.43] The raid takes place in the Air Mission Completion Segment of the Land Support Air Phase (after all ships have been sent out on any missions in the Ship Assignment Phase).

[30.44] The Axis Player announces the Frogman Raid and rolls one die, consulting the "Chariot" Table (30.46). The results on that table are self-explanatory.

[30.45] No supplies are needed or expended. However, the Chariot raid may be attempted only *once* in the game. It may be used only in a Campaign Game — not in an abbreviated scenario.

[30.46] The Chariot Table
(see Charts and Tables)

[30.5] NAVAL TRANSPORT OF TROOPS

Only the Commonwealth has the ability to transport troops by sea; the Axis had little viable coastal shipping in North Africa. What they had was used for supplies. This section applies only to personnel; transporting of supplies by sea is covered in Case 00.00.

[30.51] The Commonwealth may transfer units from one port to another, dependent on the personnel capacity of the port. Furthermore, ports may be incapacitated as a result of Enemy Air Bombardment (Case 39.3), in which event they are incapable of receiving or shipping out any personnel.

[30.52] The Commonwealth Player may make only one transfer of personnel per Operations Stage per port. Naval Transport and Transfer of troops takes place in the Truck Convoy Movement Phase. Thus, regardless of the ports used, or the direction of the transfer/transport (east-west), only one transfer/transport operation may occur per Operations Stage in any one port.

[30.53] All transfer of personnel from one port to another may affect any shipments of supplies received (see Case 30.57).

[30.54] The number of troops that may be debarked or embarked at a given port is dependent on the Port Personnel Capacity. The Port Personnel Capacity is the number of *Stacking* Points that that port can take in or send out in a given Opera-

tions Stage. Understandably, the capacity of the transfer will be limited by the port with the smallest capacity, be it the port of embarkation or debarkation.

[30.55] To be transferred, a unit or units must start the Operations Stage in the port of debarkation. It may expend *no* Capability Points during the Phases prior to the Truck Convoy Segment. In the Truck Convoy Segment, it is transferred to the port of embarkation, where it is landed at a cost in Capability Points equivalent to its Capability Point Allowance.

[30.56] Transfers may not take place between ports when one is incapacitated because of Enemy Air Bombardment (see Case 39.3). Transfer may take place between any Friendly-controlled Ports. (Control means the last Player to occupy the hex.)

[30.57] Whenever a Player transports troops by way of a port, the ability of that port to handle supplies is reduced by the percentage listed in Case 30.59. Thus, if Benghazi brought in *any* troops, its supply transport capacity (reduced or maximum level) is reduced by 25% for that Operations Stage.

[30.58] Ports may be blocked by mines, etc. (see Case 50.2). This does not affect a port's capacity to receive personnel (as above) and unless that port is reduced to *less than* 2/3 (67%) capacity, rounded up. In such case, the port may not receive or send any personnel. Any port that is totally incapacitated by bombing may not, of course, receive or send personnel.

[30.59] Port Capacity Chart
(see separate sheet)

[30.6] Commonwealth Fleet Reinforcement Schedule

[31.0] ROMMEL

GENERAL RULE:

The Axis Player receives a counter representing General Rommel. The Rommel counter aids the Axis Player in several ways (see also Raid on Rommel, Section 27.6):

1. Rommel has a Movement Capability Point Allowance of sixty (60); the Rommel counter is considered a vehicle (treat as 4-wheel drive medium truck with AM radio only and no   ). He has no combat ratings.

2. Rommel may react and retreat before assault when approached by any unit except an LRDG. He may Retreat through an Enemy Zone of Control with impunity.

3. If Rommel is in the same hex as a unit involved in combat during the Combat Phase, all units in that stack have their Morale increased by *one.*

4. If Rommel starts an Operations Stage with a unit(s) and remains with that unit for the entire Operations Stage, such unit may increase its Capability Point Allowance by *five* points.

In addition to the above, there is a chance that Rommel has been called back to Berlin or has flown to Germany for health reasons. At the beginning of each Game-Turn if Rommel is present the Axis Player rolls two dice. If he rolls a 12 Rommel is in Germany, and the Axis Initiative falls to 3 for that Game-Turn. Rommel returns the next Game-Turn (unless the Player throws another 12).

A brief Designer's Note: The inclusion of Rommel as a counter (without using other specific commanders) was a pure design decision. While Rommel did have a great affect on tactical operations and decisions, including only him in the game is a Design Affectation, pure and simple. However, the effect of the Rommel counter *is* historical.

[32.0] ABSTRACT LOGISTICS AND AIR RULES

COMMENTARY:

The design thrust of *CNA* is logistics: the availability and proper use of supplies and trucks. As a simple experiment to test the efficacy of this, try motorizing all Italian divisions in 1940, doubling Italian initial supply outlay and arrival. Watch them winter in Cairo. However, both designer and developer, men of some mercy, felt that there were those who might want to try *CNA* from a purely military viewpoint. To this end, they have formulated the rules below, enabling players to work within a simpler logistics format. The game is not really simplified, it is just a lot less work; it should also cut playing time in half (from endless to simply horrendous).Moreover, because virtually all of the design effort went into the stardard game, using these rules will have some effect on game balance. How much is up to how well and how historically the players perform. (see Section 65.0).

GENERAL RULE:

This Section applies if the Players are playing the Land Game without the Air and Logistics Games. All supply expenditures in the Land and Air Games rules are ignored and are replaced by those Ammo andFuel costs listed in this section. Players will not receive any trucks but rather receive Motorization Points which may beused to increase the CPA of non-motorized units or to transport "Supply Units." Supply Units contain Ammo and Fuel Points which must be expended in order for units to move and fight. Supply units are received in lieu of and, with some adjustments, in the same manner as standard supplies.

[32.1] SUPPLY UNITS AND SUPPLY

[32.11] The Players ignore all references to usage and expenditure of Ammo, Fuel, Stores and Water. (Thus, no unit will ever suffer attrition from lack of Stores, etc.). Only those rules for supply given below apply.
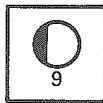
[32.12] The Players will be receiving *Supply Units,* which are abstract substitutes for all of the aforementioned points. A Supply Unit is represented by a Supply Dump counter.

[32.13] A Supply Unit has *no* combat capabilities. If any enemy combat unit enters a Supply Unit's hex, that unit is captured (and its supplies used immediately and freely).

[32.14] A Supply Unit possesses a stacking value of zero. However, only five such units may be placed in a Major City hex while only three units may be placed in any other type of hex off-map. The boxes of the Tripoli/Tunisia region may contain an unlimited number of Supply Units.

[32.15] A Supply Unit initially contains and may *never* contain more than 40 Ammo Points and 60 Fuel Points. Expenditures will reduce these numbers. When both Ammo and Fuel Points are at zero, the Supply Unit is removed. Supplies may be rearranged (at no cost) among Supply Units occupying the same hex during the Organization Phase. Movement and combat supply requirements may be satisfied by any Friendly Supply Unit within range.

[32.16] A Supply Unit may be drawn upon by any Friendly combat unit if it is within one-half (1/2) of that combat unit's CPA. Thus, a non-motorized infantry unit would have to be within 5 CP's of a Supply Unit, while a heavy weapons unit

being transported by Motorization Points would have to be within 10 CP's and a typical recce unit within 23 CP's. The distance is calculated from the unit to the Supply Unit as though it is being traversed by a medium Truck unless the unit is a non-motorized infantry unit in which case it is traced as infantry movement. The supply line may not be traced thru impassable terrain or enemy ZOC's unoccupied by Friendly units.

[32.17] Players may attempt to destroy Supply Units they are with. To do so the Player expends one-half of the CPA of all units in the hex (rounding upwards) and rolls one die for each Supply Unit in the hex. If he rolls a 1, 2 or 3 the Supply Unit is destroyed, any other result and it is unaffected. If the sum of the Stacking Points in the hex during the attempt is one or less, add one to the die roll. Attempting destruction of Supply Unit(s) occurs *prior* to any movement in a given sub-segment of a Movement/Combat Segment. Only one attempt may be made per Supply Unit per sub-Segment.

[32.18] Players may use dummy Supply Units to confuse their opponent(s). For every three Supply Units a Player receives and/or begins a scenario with, a Player may place one dummy Supply Unit on the map. It is moved int he same fashion as the real thing (although it requires less Motorization Points) and is removed upon discovery.

[32.2] SUPPLY EXPENDITURES

The Players will be required to keep track of the number of Ammo and Fuel Points in each supply unit. The Supply Dump, Truck Convoy and TOE Log Sheets may be used for this purpose. Note that for this Case's purposes, the Commonwealth Fleet and TOE Strength Points being used to Patrol do not require supplies.

[32.21] Ammo Points are expended by the number of individual battalion-equivalents supplied (that is, a five Stacking Point value division expends ammo by its component counters — not as a whole). A non-Phasing Bn-Eq requires one Ammo Point to participate in an Assault and two Ammo Points to participate in a Barrage. A Phasing unit requires twice the appropriate number of Ammo Points as a non-Phasing Unit.

[32.22] Ammo Points must be expended at the instant of combat.

[32.23] Fuel Points are expended per Operations State. Basically, each battalion-equivalent expends one Fuel Point in any Operations State in which it is moved by land (as opposed to rail or sea). In each Operations Stage, the first time a fuel requiring unit is moved, the required one (or two) Fuel Points are expended from a Supply Unit. This unit may now be moved up to its CPA in any combination of movements and halts within that Operations State. If the unit exceeds its CPA in that OpStage, additional Fuel Points must be expended at the instant the unit exceeds its CPA.

[32.24] Each tank battalion equivalent requires two fuel points for movement. Each tank Company-Eq requires one fuel point to move. All Gun-Class and Recce-type (excluding camel reconnaissance) battalion-equivalents require one Fuel Point to move. Any Motorization Points transporting infantry units (not Replacement Points) or gun unit battalion-equivalents or a real Supply Unit require one Fuel Point. (Company-equivalents or Motorization Points used for purposes other than listed above do not require Fuel Points).

[32.25] Patrolling does not require supply expenditure.

[32.3] MOVEMENT OF SUPPLY UNITS

[32.31] Supply Units may be moved by land, rail,

sea, and air. A Supply Unit may be moved by land or rail during the OpStage in which it arrives.

[32.32] Supply Units may be transported by Motorization Points. Thirty Motorization Points are required to transport one real supply unit. Six Motorization Points are required to transport a dummy supply unit. Motorization Points may be attached/detached to supply units only during the Organization Phase of an OpStage. A supply unit not assigned the minimum necessary number of Motorization Points may not be moved.

[32.33] A supply unit being transported by Motorization Points may be moved in the owning Player's Movement/Combat Phase or Truck Convoy Phase but not both. It may be moved in the friendly Movement and Combat Phase only if it begins and remains stacked with a Friendly combat unit. Not that this restriction has no effect on the normal non-Phasing movement.

[32.34] The Commonwealth Player may transport any two supply units (real and/or dummy) by rail in any one direction as the total load for a given Operation Stage. Normal rail movement rules apply.

[32.35] The Axis Player may transport supply units by Axis Coastal Shipping. Each supply unit requires 2000 tons of coastal shipping (he may use two ships on one mission).

[32.36] The Commonwealth Player may transport a total of one supply unit per OpStage by sea to/from the ports of Alexandria, Benghazi, and Torbruk. The port of destination must currently possess an efficiency level permitting the usage of at least 50% of the port's listed capacity. This sea transport occurs during the Naval Convoy Arrival Phase andis in lieu of any combat unit transport from the port of origin and into the port of destination.

[32.37] Only supply units may be transported by air. Each Player may air transport one supply unit per Game-Turn. The air transport occurs during the Organization Phase of an OpStage (Motorization Points may be detached in order for the supply unit to be air transported). The supply unit is simply picked up and placed in a new hex. The hex of origin and destination must be a major city, village, or Tripoli/Tunisia box. The owning Player must expend 12 Fuel Points before transport from any supply unit in the hex or origin. The supply unit may not be transported from a hex if there are any Enemy combat units within five hexes of that hex. The supply unit may not be transported further east (if Axis), or west (if Commonwealth) than the eastern-most/westernmot hexrow (respectively) occupied by a Friendly division (shell or full). In addition, the destination hex must be occupied by a Friendly division or brigade (not battle-group) head-quarters *counter.* An air-transported supply unit (and its supplies) may not be moved at all by the owning Player that OpStage, although it may be drawn upon (see Case 32.16).

[32.4] AVAILABLILITY OF SUPPLY UNITS

[32.41] At the start of each scenario the Players receive a specified number of Supply Units (see the Simplified Supply case in each scenario). In addition, the Players receive Supply Units from the Simplified Supply Unit Availability Tables (see case 32.46 and 32.47).

[32.42] Supply Units for the Axis Player arrive as per convoy, see 32.6 Commonwealth Supply Units are placed in Cairo unless more than three are received in a single *Game-Turn*. In such a case, one Supply Unit for every three received may be placed in Alexandria.

[32.43] At the beginning of each Game-Turn, the Players *plan* for the arrival of their supply units. The Axis Player plans two Game-Turns in advance, the Commonwealth four Game Turns in advance. Players may do as much planning as is necessary to that, with the exception of the starting Game-Turn of a scenario, Supply Units arrive on all Game-Turns (if permitted by the planning die rolls).

[32.44] The Axis Player plans his supply using the following procedure. He consults the Axis Naval Convoy (00.00) and determines the appropriate Availability Chart Tonnage Availability Letter for the month in which he is planning (*not* the month in which it is arriving). He then consults the Axis Simplified Supply Availability Table. He rolls one die and cross indexes the roll with the column matching the letter. The result is the number of Real Supply Units he may bring in on Axis Naval Convoys two Game-Turns from then.

[32.45] The Commonwealth Player plans his supply using the following procedure. He consults the Commonwealth Simplified Supply Availability Table and determines the time period involved. This time period is that of the *arrival* of the Supply Units, not the one in which they are being planned. He then rolls one die, cross indexing it with the proper column. The result is the number of Real Supply Units he receives four Game-Turns hence.

[32.46] Axis Simplified Supply Availability Table
(see Charts and Tables)

[32.47] Commonwealth Simplified Supply Availability Table
(see charts and tables)

[32.5] MOTORIZATION POINTS

[32.51] Motorization Points are used in place of Truck Points. They are used to transport (motorize)units and may also be assigned to transport Supply Units. Motorization Points are treated in all aspects as Medium Truck Points except as modified in this Major Case.

[32.52] Each scenario lists the number of Motorization Points initially available to the Players. Additional Motorization Points are received as reinforcements as per scenario instructions. In addition, Players may bring in Motorization Points as Replacements at a rate equal to their ability to bring in Mdium Truck Replacement Points.

[32.53] Motorization Points may be used to transport units and all Guns with a CPA of 0+. All normal units are considered to possess their own 'built-in' transport, as in the standard game.

[32.54] All 'leg' infantry units may be motorized. However, a Player must assign Motorization Points sufficient to transport all historically motorized infantry units (i.e., those with CPA's of 8+ and 10+) before assigning them to any other infantry-type units.

[32.55] Motorization points are *not* subject to Breakdown. All other Breakdown rules apply.

[32.56] Motorization Points are normally subject to loss only if the unit they are assigned to is eliminated. If their assigned unit is captured, the Motorization Points are also captured and may be used by the Enemy. Note that a Barrage Combat Result against Trucks never occurs.

[32.57] Motorization Points are subject to (abstract) loss from various factors (mostly Enemy aircraft). During the first Naval Convoy Stage of each month, Motorization Points losses for the previous month are determined. The Players consult the Abstract Motorization Point Loss Chart and read the result for the appropriate month. The number to the left of the stroke is the percentage of

Motorization Points lost by the Commonwealth Player; the number to the right of the stroke the percentage lost by the Axis Player. The percentage is that of the total Motorization Points belonging to the Player on the map (which includes Tripolitania-Tunis boxes) at that point in time. The points lost may be removed from anywhere on map Section E for the Commonwealth Player or anywhere on Section A (including the off-map region) for the Axis Player.

[32.58] Motorization Points transporting a supply unit have the following attributes:

A. They possess a CPA of 15.

B. If forced to exceed their CPA for any reason, they must be returned to the last hex in which they had not exceeded their CPA.

C. Are not required to expend CP's if stacked with combat units participating in combat.

D. May react unless the unit moving adjacent possesses a CPA of 35 or more.

[32.59] Abstract Truck/Motorization Loss Chart.
(see Charts and Tables)

[32.6] SIMPLIFIED AXIS NAVAL CONVOYS

[32.61] In the abstract Logistics game system, Axis Naval Convoys consist of all Supply Units, Motorization Points and Replacement Points for that Game-Turn. These items may be divided and assigned to any Convoy Lane available, as per rules for such assignment (56.0). These are no tonnage limitation.

[32.62] The Axis Player may never assign more than three Supply Units and twenty Motorization Points to any one Convoy Lane in any one Naval Convoy Stage. Note that the Axis Player is limited by the Replacement Pool's charts as to the maximum number of each type item that may be assigned to Axis Naval Convoys (total) for arrival during a particular Game-Turn.

[32.63] The Commonwealth Player may attempt to destroy whatever is being shipped by a particular convoy. He may attack all convoys regardless of the weather on the map. The attack(s) occur in the Naval Convoy Phase of the OpStage. The Axis Player announces which convoy lanes are being used. The Commonwealth Player then attacks each arriving convoy separately.

[32.64] Each attack is carried out as follows: The Commonwealth Player consults the Simple Axis Naval Convoy Bombing Chart (32.66) and reads down the proper Convoy Lane column until reaching the westernmost location of a qualifying Commonwealth division. He then reads across that row to determine the number of Bomb Points to be used in the attack. The Commonwealth Player then consults the Air Bombardment Combat Results Table, rolls two dice reading them sequentially and refers to the previously determined Bomb Points column to yield the result. The result is expressed in percentage of supply units, Motorization Points and Replacement Points assigned to that convoy lane that are destroyed.

[32.65] The result obtained above on the Axis Naval Convoy is modified as follows:
A. A result of 10% applies *only* to Motorization Points and Replacement Points, rounding fractions down for the former and rounding fractiongs up for the latter.
B. A result of 20% or greater applies to all items being conveyed, rounding fractions down. However, at least one point of each and Supply Unit is always eliminated.

Losses of tanks and guns, *within each nationality*, are in percentages of the total, not the individual

types. For example, a convoy carrying one point of CV 33's, two points of PzII's, two points of PzIIIJ's and two points of PzIVH's that suffers a 10% loss only has the CV 33 and one German tank point eliminated (the Axis Player's choice).

[32.66] Simple Axis Naval Convoy Bombing Chart
(see Charts and Tables)

[32.7] BOMBARDMENT OF THE COMMONWEALTH FLEET

[32.71] The Axis Player may perform a limited number of Bombardment attacks on the Commonwealth Fleet in Alexandria Harbor.

[32.72] The Axis Player determines the number of such attacks he is permitted to make in the scenario as follows: He rolls one die secretly, adding two to the number if playing a Campaign Game. The result is the number of attacks the Axis Player may perform against Commonwealth ships using the Air Bombardment and Secondary Barrage Targets Combat Results Table in that Scenario.

[32.73] The Axis Player may only perform one such attack per Operations Stage. Each attack must be plotted secretly during the Commonwealth Fleet Assignment Segment of an Operations Stage. Once planned, it occurs in the Tactical Naval Movement Segment of that Operations Stage.

[32.74] The attack is performed as follows:

a. The Axis Player determines the strength of the attack by consulting the Air Bombardment and Secondary Barrage Target Combat Results Table and rolling one die, adding two to the die roll if playing the Campaign Game. The attack is determined on that number of columns in from the left hand side of the table (that is, a roll of 1 would result in the attack being performed on the Bomb Points: 1-20 column, etc.)

b. The Axis Player rolls two dice, reading them sequentially. He cross-indexes the dice roll with the proper column to determine the result. The result is the number of damage points (see the Chariot Raid Table, 30.46) inflicted upon the ships in Alexandria Harbor (only). The Axis Player may distribute these Damage Points in any manner he wishes.

[32.75] No Bombardment attack may be made if Game-map section "E"'s weather is either rain storm or sand storm.

[32.8] ANTI-AIR UNIT MODIFICATIONS

[32.81] The Commonwealth Player removes all Anti-air units and all Light and Heavy Anti-air TOE Strength Points (regardless of where assigned) from play. This includes anti-air Replacement Points. Captured Axis anti-air TOE Strength Points are immediately removed from play.

[32.82] The Axis Player removes all German anti-air units with ID Codes of "z," and "bb" from play. All assigned light anti-air TOE Strength Points and Replacement Points are removed from play. Heavy anti-air TOE Strength Points and Replacement Points are unaffected.

[32.83] The Axis Player's Italian forces are affected as follows:

1. All anti-air units (i.e., those with ID Codes of "ss," "tt" and "uu") are removed from play.

2. All anti-air TOE Strength Points assigned to emplaced gun units (ID Code "pp") are removed from play (just the AA points);

3. Artillery units that may be assigned anti-air points (ID Code "kk") lose all assigned *Heavy* anti-air TOE Strength Points.

4. All Heavy anti-air (i.e., 75mm and 90mm) Replacement Points are lost.

5. Light anti-air Replacement Points may only be brought in at a rate of one per month (effectively halving the number of available points).

[32.84] All of the above modifications and restrictions apply to anti-air TOE Strength Points and Replacement Points. They do not affect non-anti-air TOE Strength Points/Replacement Points that possess an anti-air rating.

[32.9] ROAD AND TRACK STACKING MODIFICATION

The Players ignore all Road and Track (only) Stacking Point restrictions listed in Section 9.0.

ADDENDA

The following addenda to the rules and counters of *Campaign for North Africa* are the result of continuing testing and fine tuning by the design/development team. In a game the size of *CNA*, it is a virtual certainty that some points will be in need of clarification — or even correction, despite the most elaborate precautions. The following addenda are included as the game goes to press in order to provide the most up-to-date game possible.

[3.1] *(clarification)* Parent Unit. The terms Parent Unit and Parent Formation have been used interchangeably. It was intended that they express the following distinction: a Parent *Unit* has counters attached while a Parent *Formation* has counters assigned.

[3.4] *(clarification)* Coast Defense Guns. There are three types of coast defense guns in *CNA*:

A. In name only: A number of units possess the title of Coastal Defense Artillery that are nothing of the sort. These may be distinguished by the fact that their guns possess CPA's of 15. They were simply artillery units (theoretically) assigned to a coastal defense role. They may contain any type of artillery.

B. Sited Guns: These units and/or TOE Strength Points possess a CPA of "0+." This indicates that while the guns did not possess organic transport, had transport been available, the guns could have been moved with little trouble.

C. Emplaced Guns: The units and/or TOE Strength Points possess a CPA of "0." This indicates that the guns have been "fixed" in revetments and may never be moved. Note that there were emplaced guns at Benghazi that are not represented in *CNA* due to their inability to fire at shoreward targets coupled with the game restriction as to how far west Commonwealth warships may operate.

[3.6] LIMITED INTELLIGENCE
(addition)

CNA relies heavily on the Players' willingness to trust one another. Virtually all of the information in the game is kept hidden from your opponent. Even in land combat, only the totals are revealed, not the units producing them.

[3.61] Players are not entitled to any knowledge of the status, composition, or any other attributes of any opposing counter in *CNA* except as expressly indicated in the rules.

[3.62] The following is a partial listing of the information available to opposing Players:

Map. A Player may examine any stack of counters on the game map. What is in those counters is another story.

Anti-armor Fire. The types of tanks and self-propelled guns, presence of armored recce-type and/or halftracks actively participating in Assault in a hex but *not* the numbers, hex(es) of origin or which TOE Strength Points absorbed the Damage Points.

Close Assault. The unit types actively participating in Close Assault (or forced into it via Overrun) but not the numbers, weapon systems, what took losses, etc.

Prisoners. Nothing. All you get is the prisoners and captured equipment; they may not be quizzed.

Patrol. No mention of the state of supplies or attached trucks (other than whether the unit is motorized).

Broken down vehicles/destroyed tanks/abandoned vehicles. The contents of the marker is secret.

POW's/POW Camps/Guards. The numbers (and nationality, if Axis) are secret.

Construction. The item undergoing construction/demolition is secret.

Trucks & Replacement Points. The numbers, types, etc., are secret.

Air reconnaissance. Even less detail than Patrol.

Planes. The Players are entitled to know the exact makes of opposing planes engaged in air-air combat but the pilot ratings are secret up to the instant of combat. Land units without any Anti-air TOE Strength Points or an SGSU in a hex in which a bombing or strafing mission occurs are not entitled to know the numbers or types of planes engaged in the mission(s), only the type of mission being performed.

[12.0] *(clarification)* For the purposes of this Section, all references to artillery units apply to any unit comprised of TQE Strength Points with a Barrage Rating.

[12.23] *(addition)* Commonwealth warships are always considered to be historically identified targets.

[12.46] *(clarification)* Trucks do not receive terrain benefits.

[14.0] *(clarification)* Anti-armor fire occurs within a hex occupied by the non-Phasing Player's units. However, either Player may be the attacker and/or the defender.

[14.15] *(addition)* A parenthesized anti-armor rating may only be used if there are no units comprising TOE Strength Points possessing non-parenthesized anti-armor ratings. Note that replacement points do not affect this ability.

[14.27] *(clarification)* The Phasing Player may send TOE Strength Points from a unit into different hexes, regardless of whether all are engaging in anti-armor or all in close assault.

[16.51] *(clarification)* Note that the Patrolling Player does not identify the types of TOE Strength Points comprising the unit. **Example:** A tank battalion comprising four Shermans, two Stuarts, and two Mark VI Lights (8 TOE Points) can be simply reported as a tank battalion of six points (8 ± 2 points).

[19.62] *(addition)* Any eliminated unit whose maximum TOE Limit is one or two TOE Strength Points. If the unit's assigned spot has been taken by the time it is recreated, it is treated as an independent unit.

[20.63] The Axis Player is required to schedule at least *two* weeks in advance, those Replacement Points (from his Axis Replacement Pool) he is sending to NorthAfrica via the Axis naval convoys. Replacement Points may be scheduled to arrive during any OpStage of a Game-Turn, as per the naval convoy rules. For example, Replacement Points arriving during the third week of August, 1941 must be scheduled for Axis naval convoys in the first week of August's Naval Convoy Schedule Phase. (Players should note that the maximum tonnage that the Axis naval convoys of the third week of August is determined during the *second* week of August!)

[21.11] *(addition)* TOE Strength Points comprising a headquarters unit are not subject to breakdown, regardless of type.

[21.63] *(clarification)* Any portion of the broken down vehicles in a hex may be towed. However, if only some are towed, the owning Player will have to place an additional marker in the new location and adjust his information on the control sheet (see Case 21.67).

[21.67] *(addition)* Players should avoid proliferating masses of broken down vehicles and destroyed tank markers over the game map.

[23.15] *(addition)* The Commonwealth Player receives, via the Reinforcement Track, two tank battalions completely refitted (re-equipped) with Scorpion tanks (historically the 42nd and 44th Royal Tank Regiments). These two battalions are engineer units but possess only anti-minefield capabilities. Each battalion is considered to possess engineer unit status while it contains at least six Scorpion TOE Strength Points. Note that the points may not be transferred to other units for any reason, including the elimination of the "tank" battalion.

[24.79] *(addition)* A maximum of one flying boat facility and one non-flying boat facility may be built in any hex. Air landing strips and flying boat alighting areas may be upgraded to airfield and flying boat basin status respectively. However, the facility may not be used while the upgrading is underway and no benefit in reduction of construction is applied.

[27.52] *(clarification)* This includes pipeline in railroad hexes (although the railroad itself may not be harmed by a raid).

[30.36] *(addition)* If the warship is eliminated while transporting a commando unit, the commando unit is also eliminated.

COUNTER ADDENDA

Counter Section Nr. 1

A. The following headquarters units are missing their identifying stripe: 63 Cir, 157 (63), 158 (63), 64 Cat, 141 (64), 142 (64), 101 Tst, 65 (101), 66 (101), 9 Brs (101), 102 Trn, 61 (102), 62 (102), 7 Brs (102), Ariete, 132 RC (Ariete), 8 Brs (Ariete), Littorio, 133 RC (Littorio), 12 Brs (Littorio), and the 136 GGFF.

B. The 101st Trieste Division's divisional and regimental headquarters counters (i.e., 102 Tst, 65, and 66) should show a motorized infantry instead of mechanized infantry symbols.

C. The 2/8Brs (Ariete) Anti-tank Battalion is assigned directly to the Ariete's divisional headquarters and should bear a counter abbreviation and parent formation indicator of "2 (Ariete)." It is correctly listed on the Ariete's OA Sheet.

D. 141st Regiment of the 64th Catanzaro Division is missing its organization size indicator of "III."

E. The IV/66 (101st Trieste) Company should show Heavy Weapons and not an Anti-tank symbol.

Counter Section Nr. 2

A. The following units are missing the headquarters stripe: 30 GaF (Bardia), 10 Brs, Libyan, 54 Ter (Derna), and 4/10 Army. Note that the Stacking Points indicators of the 54 Ter and 4/10 Army are correct in not possessing parentheses.

B. The headquarters counter for the 10th Bersaglieri Regiment (10 Brs) should show a mechanized infantry instead of a motorized infantry symbol.

C. The 5th and 23rd Desert Patrol (5 DPtl and 23 DPtl) units should show recon instead of motorized infantry symbols.

D. The 5th, 6th, and 7th Artillery Regiments of the Tobruk Garrison should show counter abbreviations and Parent Unit indicators of, respectively, V/31 (Tobruk), VI/31 (Tobruk), and VII/31 (Tobruk). The counter abbreviations on the Tobruk Garrison's OA Sheet are also incorrect.

Counter Section Nr. 3

A. The 138th Infantry Battalion of the 2nd CCNN Division — 138 (238/2CN) — should *not* show a headquarters stripe.

Counter Section Nr. 4

A. The ArKo 104 artillery counter is missing its headquarters stripe.

B. The 368 Heavy Flak Battalion should show a Heavy AA instead of an AA symbol.

C. The 200th Regiment of the 15th Panzer Division should show a motorized infantry instead of a mechanized infantry symbol.

D. The 5th Light Panzer Division's Stacking Point indicator is missing its closing parenthesis.

Counter Section Nr. 5

A. The 2nd New Zealand Cavalry (2NZ Cav) should show an Armored Recon instead of a Tank symbol.

Counter Section Nr. 6

No errata.

Counter Section Nr. 7

A. The 65th Anti-tank Regiment should show an Anti-tank instead of an Artillery symbol.

B. The 14 (14/70) Anti-tank Company should show an Anti-tank instead of an Artillery symbol.

C. The 61st Heavy AA counter is missing its "1" Stacking Point indicator.

Counter Section Nr. 8

A. The 13th DCL Armored Car Regiment is attached and not assigned to the 18th Indian Brigade and should show a dash (—) instead of "18 In X" as its Parent Formation indicator.

B. The 9th Australian Division's headquarters counter should not show an Engineering Capability (E) indicator.

Counter Section Nr. 9 (back and front)

A. The Minefield, POW, Guard, and POW Camp counters should be labelled as "Commonwealth" and not "Allies."

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    Strategic Air Force: **Eric Berend**
    Tactical Air Force: **Gerry Roston**
  Forward Forces Commander: **Robert Croker**
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