



Ultimate War

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ULTIMATE PLUG-INS

Conqueror's Warfare



Ultimate War

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WELCOME TO ULTIMATE PLUG-INS!

THIS PRODUCT IS THE LATEST IN OUR LINE OF SUPPORT MATERIALS FOR THE HARDBACK rulebooks that comprise the *Pathfinder Roleplaying Game*. When you see the “Ultimate Plug-Ins” logo at the top of a Legendary Games product, you know that it is designed to fit directly with the themes, scope, and style of those rules hardbacks, because every member of the Legendary Games team is a regular veteran contributor to those hardback rulebooks and their softcover expansions. When you buy Ultimate Plug-Ins, you are getting rules from the same people who bring you many of the rules you already use. The all-star designers of Legendary Games are committed to bringing you—the busy GM or player—the ultimate in third-party support for your Pathfinder campaign, combining innovative design, amazing artwork, and fantastic production values that are as functional as they are beautiful to give you everything you need to ***Make Your Game Legendary!***

SPECIAL ELECTRONIC FEATURES

We've hyperlinked this product internally from the Table of Contents and externally with links to the [Pathfinder Reference Document](#), the official online compendium of game rules, as well as the [d20pfsrd.com](#). If it is in the core rulebook, we generally didn't link to it unless the rule is an obscure one. The point is not to supersede the game books, but rather to help support you, the player, in accessing the rules, especially those from newer books or that you may not have memorized.

ABOUT LEGENDARY GAMES

Legendary Games is an all star team of authors and designers, founded by Clark Peterson of Necromancer Games and coordinated by Jason Nelson. Legendary Games uses a cooperative, team-based approach to bring you the best in imaginative play, from brand-new creative games to fantastic expansion material for your favorite role-playing games. We are gamers and storytellers first, and we believe that passion shows in our products. So check us out, and Make Your Game Legendary!

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WHAT YOU WILL FIND INSIDE ULTIMATE WAR

THIS SUPPLEMENT GREATLY EXPANDS THE MASS COMBAT RULES INTRODUCED SEVERAL YEARS AGO in the hit kingdom-building adventure path and now revised and published in hardback form in *Pathfinder Roleplaying Game Ultimate Campaign*. Having designed and implemented these rules, played them out in real campaigns, and shared ideas with gamers from all over the world about what worked well, what did not, and what areas people would like to see expanded, the new published version of the rules represents a major advance, but there are still many areas it does not cover, or deals with only superficially. Many of these areas are covered in Ultimate Battle from massive expansions to command boons, equipment, and tactics to army details like camouflage and scouting, fatigue, terrain and weather effects, and the aftermath of battle. Ultimate War adds still more command boons, but its primary focus is to take warfare into entirely new directions, into the skies above, across the seas beyond, and under the waves in the ocean depths. Ultimate War also deals extensively with sieges and siege weapons, including magical siege weapons, and for sky, sea, and siege alike it presents a host of new tactics, equipment, and vehicles along with rules to integrate them with the action on a standard land-based battlefield. Ultimate War also offers a system of modular unit construction and interaction, allowing you to design combined arms units capable of a little bit of everything.

Legendary Games was founded on the principle of delivering first-class product for your Pathfinder Roleplaying Game experience, brought to you by the very authors who design and contribute to the adventures, hardbacks, and campaign supplements you are already using. *Ultimate War* embodies that principle through and through. If you want innovative new rules created by the people who bring you the rules and know them like no other third-party publisher, this is the place. The Legendary Games tradition is to combine rich story and background, innovative layout, beautiful aesthetics, and excellence in design that is second to none. This product is the latest in that tradition, and we hope you enjoy using it as much as we enjoyed making it. Game on!



- Jason Nelson

ULTIMATE WAR

THIS PRODUCT PROVIDES ALTERNATE RULES FOR USE with the standard mass combat rules and also offers the unique Combined Arms modular army-building system that can be substituted in place of the standard rules. The rules for constructing armies are described here, and throughout *Ultimate War* rules are presented in parallel wherever special rules apply differently for the Combined Arms rules versus the standard army rules and kingdom-building rules presented in *Pathfinder Roleplaying Game Ultimate Campaign* (and also freely available online on the [Pathfinder Reference Document](#) and [d20psrd.com](#)) and expanded in *Ultimate Battle* and *Ultimate Rulership* from Legendary Games. Any rules reference in this product to the normal rules or standard rules for mass combat and armies refers to the rules presented in those products. Rules in *Ultimate Battle* are noted with the superscript^{UB} and those in *Ultimate Rulership* with the superscript^{UR}.

MELEE VALUE, RANGED VALUE, AND CASUALTIES

The published mass combat rules use only a single factor to account for an army's offensive capabilities, Offense Modifier (OM). The more detailed Combined Arms rules in this product subdivide this characteristic into two scores: Melee Value (MV) to represent close combat in melee and Ranged Value (RV) to represent missile and magical attacks that allow an army to attack at range. The rules in this product are presented for both these modular rules and the simpler published army rules. If a rule states a modifier that applies only to MV or RV, you can instead apply that bonus to the OM of an army using the standard rules. If the MV and RV values are different, use the higher of the two values.

Similarly, the published rules use hit points to track the relative health of an army, while the modular unit rules contained in this product use the term Casualties, which can individually and separately damage the smaller divisions or subunits within a larger unit or army, gradually decreasing its fighting efficiency. If you are using the standard published rules, any reference in this product to Casualties deals an equivalent number of hit points of damage to a standard army unless specifically stated otherwise.

LEADERSHIP BONUS

A commander's base Leadership Bonus (LB) is equal to +1 for every 5 ranks of Profession (soldier), with the caveat that soldiers recognize and respect experience and reputation as much as or more than academic knowledge of the battlefield. As a result, ranks of Profession (soldier) obtained through magical means, such as a *headband of vast intellect*, provide only half the normal LB. In addition, a commander's LB is increased by 1 for each of

the following: base attack bonus +6, base attack bonus +11, base attack bonus +16, Charisma modifier +3 or greater, Wisdom modifier +3 or greater, Leadership, or Skill Focus (Profession (soldier)). Ability modifiers that are magically enhanced provide this increase only if that bonus is permanent, such as through a magical headband.

A commander's Leadership Bonus for specialized forms of warfare, such as naval combat or siege warfare, may be determined by a skill other than Profession (soldier), and is described in the relevant sections below.

COMMAND BOONS

The following command boons are in addition to those introduced in *Pathfinder Roleplaying Game Ultimate Campaign* and in *Ultimate Battle* and may be selected by any unit or army whose commander qualifies for the boon.

Battlefield Illumination: Once per day, an army with this ability can increase the light level on the battlefield by one category for all armies on the field (see **Visibility^{UB}**). Alternatively, that army can increase lighting levels by two categories, though the modifiers for this enhanced light level apply only to that army and any army engaged with it, and to ranged attacks made against that army and any army engaged with it. An enemy army with Magical Advantage can forgo attacking in order to eliminate this increased light by making an opposed Morale check against the army that created the illumination.
Requirement: The character granting this boon must be capable of casting *daylight* at least 5 times per day, or the army must be equipped with fireworks.

Consecrate Battlefield: An army with this ability is immune to the **create spawn army special ability^{UB}** and gains a +2 bonus on DV against armies comprised of undead or evil outsiders. In addition, once per battle this army can negate the effect of the **create spawn army special ability** against any allied other army. An army gains no benefit from this ability during any Battle Phase in which it uses the **Aggressive Attack** or **All-Out Attack strategy^{UB}**.
Requirement: The character granting this boon must be capable of casting *consecrate* at least 5 times per day.

Cornucopia: An army with this boon has a magical means of supplying itself with food and drink and banishing fatigue, reducing its dependence on a heavy supply train and giving it great strength at resisting sieges. The unit can attempt a Morale check to avoid becoming fatigued after using a **forced march^{UB}** and it never becomes fatigued if it is inside a settlement or fortification that is **blockaded**, as described in the Siege Warfare section. An army with this boon treats its ACR as 2 higher for the purpose of **healing after combat^{UB}**.
Requirement: The character granting this boon must be capable of casting *create food and water* at least 5 times per day.

Desecrate Battlefield: An undead army with this ability adds +1 to its MV, RV, and DV, and its ACR is

treated as 2 higher for the purpose of determining its hit points. If attacked by an army with the Magical Healing command boon that is using that ability to perform a Magical Barrage, the attacking army gains only one-half the normal bonus to its OM (minimum 0). **Requirement:** The character granting this boon must be capable of casting *desecrate* at least 5 times per day.

Divine Favor: An army with this boon can add a +1 bonus to any die roll once per Battle Phase. It may apply this bonus after the result of the roll is known. Alternatively, once per battle it may choose to reroll any one die roll it makes; if it uses this ability, it forfeits the benefits of this boon for the remainder of the battle and for 1d4 days thereafter. **Requirement:** The character granting this boon must be capable of casting 4th-level divine spells.

Falling Dusk: Once per day, an army with this ability can decrease the light level on the battlefield by one category for all armies on the field (see **Visibility^{UB}**). Alternatively, that army can decrease lighting levels by two categories, though the modifiers for this decreased light level apply only to that army and any army engaged with it, and to ranged attacks made against that army and any army engaged with it. An enemy army with Magical Advantage can forgo attacking in order to eliminate this decreased light by making an opposed Morale check against the army that created the darkness. **Requirement:** The character granting this boon must be capable of casting *deeper darkness* at least 5 times per day.

Magical Barrage: An army whose commander qualifies for this command boon by having the ability to channel negative energy can use the Magical Healing command boon upon itself or an allied army if that army is comprised of undead. The army must choose each Battle Phase whether to use Magical Barrage or this special form of Magical Healing. This ability otherwise functions as described in *Ultimate Battle*.

Magical Healing: An army with this command boon can use the Magical Barrage command boon instead when fighting an army comprised of undead. This ability otherwise functions as described in *Ultimate Battle*.

Skywardens: An army with this command boon gains +1 RV, +2 DV, and +2 to all Scouting checks (see **Camouflage and Scouting^{UB}**) made against aerial armies. **Requirement:** The character granting this boon must have Skill Focus (Perception) or at least 6 ranks in Perception.

Smoke Screen: Once per day, an army with this boon can cover the entire battlefield with light smoke (see **Visibility^{UB}**) that lasts until the end of the current Battle Phase. Alternatively, that army can cover itself with heavy smoke, though the modifiers for this heavy smoke apply only to that army and any army engaged with it, and to ranged attacks made against that army and any army engaged with it. **Requirement:** The character granting this boon must be capable of casting *fog cloud, obscuring*

mist, pyrotechnics, or a similar effect at least 5 times per day, or the army must be equipped with fireworks.

Surgical Strike: An army with this boon gains +2 MV but takes a -2 penalty on damage. In addition, if using the Combined Arms rules, if this unit's MV exceeds the DV of the target unit by 5 or more, the attacking unit may choose how to allocate the damage it deals among the defending unit's divisions. **Requirement:** The character granting this boon must have at least three teamwork feats.

War Chant: An army with this boon unleashes a constant stream of whoops, yells, pounding drums, bashing shields, and rhythmic battle music that heartens them in the face of danger and intimidates their opponents. The army gains a +1 bonus on its own Morale checks during battle, and any army engaged with this army takes a -1 penalty on Morale checks for as long as it remains engaged and for 1 Battle Phase after it disengages. In addition, during any Battle Phase in which the army damages another army in melee, the target army takes a -1 penalty to its MV and RV during the next Battle Phase against the army with this boon. **Requirement:** The character granting this boon must have the bardic performance class ability or at least 11 ranks of Intimidate.

COMBINED ARMS

This section provides an alternative method for army construction to what is presented in *Pathfinder Roleplaying Game Ultimate Campaign*. The published rules are simple and straightforward when it comes to constructing armies; you create them as part of your kingdom turn, and each army is an undifferentiated block of soldiers with one common hit point pool, all equipped alike, and able to fight to the last hit point with no reduction in fighting efficiency until total annihilation when its hit points are spent. Simplicity is a virtue in game design, but it is not without a certain cost in verisimilitude. These rules allow for great granularity, which may not be to everyone's taste, but they are presented here for those who wish a more detailed system of unit construction.

WHY USE COMBINED ARMS?

Mass combat is a quirky beast in the context of role-playing games. On the one hand, it makes perfect sense to include, as small-scale adventures against the backdrop of a larger war are absolute staples of fantasy fiction and media. On the other hand, players who enjoy sitting around a table and role-playing their heroes as they delve dungeons and solve mysteries and travel the farthest reaches of the world and beyond may have little interest in the kind of bookkeeping and minutiae that traditionally go along with dealing with armies on the battlefield. On top of that, you have to deal with intersecting yet incommensurable levels of abstraction in what an individual hero can do versus

what an army can do, and simply applying one to the other is going to leave one or the other hopelessly outgunned with the mathematics are not designed their way. The history of mass combat and role-playing games is littered with systems from grossly abstract to almost ludicrously complex, and that's not necessarily a bad thing. Gamers are varied in their interest in and tolerance for rules granularity, and having rulesets that cater to both ends of the spectrum is not a bug; it's a feature.

That answers the philosophical question of why this system exists when there is already a perfectly serviceable system available in *Pathfinder Roleplaying Game Ultimate Campaign*, already expanded in a great many ways in *Ultimate Battle* from Legendary Games. However, here are some specific reasons you might want to use this system instead.

Units with Discrete Parts: In a battle where groups of soldiers aggregate in unique places and spaces. In real life, units include infantry, cavalry, artillery, scouts, technical support, and on down the list. The Combined Arms system lets you create units that mirror what you see in modern military organizations, wherein a single army (or unit of an army) contains a variety of units, each working together.

A More Elegant System for Casualties: In any battle, there will be casualties, but one of the tricky parts of having single masses of hit points, whether for armies or individual player characters, is that it doesn't allow you to represent in-combat attrition very well. That's fine for personal combat on the scale that usually happens in a *Pathfinder* game, as you want your heroes to keep up their combat effectiveness as long as possible, but it feels less appropriate for a mass combat system where armies naturally begin to break down as the soldiers making up a unit are killed, wounded, or routed from the field. Allowing separate allocation of damage to individual sub-units allows you to model that kind of gradual decrement to a unit's effectiveness and also gives you a different level of tactical flexibility in resolving combat, depending on who gets to allocate the damage from a Battle Phase, the attacker or the defender. At the same time, using modular units makes it easier to replenish or replace different parts of a unit in between battles.

ARMIES, UNITS, AND DIVISIONS

Whereas the base unit for mass combat in the published rules is the **army**, these rules instead focus more on the individual units that make up that army. Much as in naval terms a fleet is made up of several squadrons, and each of those squadrons is made up of several ships, so too an **army** is made up of several **units**, while each **unit** is usually made up of several **divisions** (though sometimes a unit can comprise only a single division; this is called a **solo unit**). The divisions within a unit comprise its strength, and as

those divisions are whittled away in strength so too is the base unit in its combat effectiveness. The most common names for units of various sizes are listed on **Table 3: Army Size^{UB}**. The number of soldiers in a **unit** in these rules is the same as the number of soldiers in an **army** using the standard rules.

Navies and Air Forces:

While the term "army" is used throughout, the same rules can be used interchangeably with waterborne units (forming navies) and airborne units (forming air forces). For air forces and navies, the term **squadron** can be used in place of **unit**, but all of the same rules apply.

Creating a Unit: This process is similar to the creation of an army as described in *Pathfinder Roleplaying Game Ultimate Campaign*, using the rules described in **Recruiting an Army^{UB}** to gather your soldiers. Once you have enough recruits for the army you wish to create (or once you issue an Improvement Edict to create an army, if using the standard rules), you can create an army using the following steps. You can use the

Army Sheet published in *Pathfinder Roleplaying Game Ultimate Campaign* with very few modifications.

Step 1: Assign leader: Each unit requires a commander. The army's record sheet should indicate the commander's name, Charisma modifier, and Leadership Bonus (LB), as well as what command boon(s) that commander possesses. A typical NPC army has 2-4 significant NPC



characters (see **Commanders^{UB}**) as leaders; the remainder of its commanders are ordinary officers that provide no command boons. A PC commander gains a +2 bonus to the MV, RV, and DV of his unit, as well as on Morale checks. A significant NPC character grants a +1 bonus to these unit statistics.

Step 2: Divisions: A full-strength unit comprises 5 divisions of equal size. However, not all commanders are capable of handling the leadership demands of a full unit; hence, the maximum number of divisions in a unit is limited to $3 + \text{the commander's Charisma modifier}$, up to a maximum of 5. A unit that is lacking one or more divisions at the beginning of a battle takes a -1 penalty to MV, RV, DV, and Morale checks per missing division.

Each division has 1/5 the number of soldiers as the unit as a whole (see **Table 3: Army Size^{UB}**). In most respects, a division has similar combat statistics to a unit two sizes smaller.

Step 3: Army Challenge Rating (ACR): A unit's Army Challenge Rating (ACR) is determined by the base CR of the creatures comprising the unit, modified by the size of the unit listed on **Table 3: Army Size^{UB}**.

Step 4: Casualties: Casualties reflect how many points of damage a unit can take before being defeated. The term is used here to reflect the fact that all "army hit points" lost in battle do not represent actual deaths, but rather soldiers being taken out of action in any of a number of ways, but the term is equivalent to and interchangeable with hit points in all respects.

Each division within a unit can take Casualties equal to its ACR before it is defeated; hence, a full-strength unit has total hit points equal to its ACR times 5. If a division is at 0 hit points, when its unit leaves the battlefield, whether victorious or in retreat, that division can be healed using the normal rules. If, however, the division takes additional damage when it is already at 0 hit points, it is destroyed rather than merely being defeated. A destroyed division cannot be healed and must be replaced with reinforcements (see **Recruiting an Army^{UB}**).

Step 5: Melee Value (MV): A unit's combat prowess in melee is reflected in its MV. Units have a base MV equal to their ACR plus the LB of its commander. Units directly commanded by a player character add an additional +2 bonus to MV; those commanded by a significant NPC character (see **Commanders^{UB}**) add a +1 bonus. MV can also be modified by equipment, special abilities, command boons, tactics, fatigue, environmental conditions, and the like.

For each division defeated or missing from the unit's full strength, it takes a -1 penalty to its MV.

Step 6: Ranged Value (RV): A unit's combat prowess in ranged combat is reflected in its RV. RV functions identically to MV, except that units that do not possess ranged weapons or other ranged attack capability, they cannot make ranged attacks (denoted as "RV -"). If some divisions within a unit have ranged weapons and some do not, the overall unit's RV is reduced by 2 for each

division that lacks ranged weapons (including divisions that are missing or defeated).

Step 7: Defense Value (DV): The defensive abilities of a unit are reflected in its DV. Units have a base DV equal to $10 + \text{their ACR and their commander's LB}$, adjusted by any applicable modifiers, such as those listed under MV.

For each division defeated or missing from the unit's full strength, it takes a -1 penalty to its DV.

Step 8: Morale: A unit's Morale reflects its fighting spirit and its skill and confidence on the battlefield. Morale checks are often required to succeed at various battlefield tactics, or to overcome special effects caused by enemy armies. A brand-new unit has a Morale score equal to the kingdom's Loyalty modifier divided by 20 (rounding down, with a minimum of 1 and a maximum of 10), and it can increase or decrease during the course of a battle and in its aftermath, increasing with victory and falling with defeat. A unit's Morale score can never exceed 10, and if it ever drops to 0 the unit disbands (see **Bloodied, Defeated, Destroyed, and Disbanded Armies^{UB}**). A typical NPC army's Morale score is 3. If you are using this mass combat system without the kingdom-building rules, you can substitute a value equal to one-half of the commander's number of ranks in Profession (soldier), or Profession (sailor) for naval units.

A unit's Morale score modifies its Morale checks, adding the Leadership Bonus of its commander and an additional +2 bonus if the commander is a PC and +1 if it is a named significant NPC character, plus any relevant modifiers. For each division missing from the unit's full strength, whether already missing before battle or defeated during a battle, the unit takes a -1 penalty to its Morale checks.

When a division is destroyed, its unit loses 1 point of Morale and takes an additional -1 penalty to Morale checks for the duration of the current battle.

Step 9: Movement: A unit's Movement score indicates the number of 12-mile hexes it can travel per day (see **Overland Movement** in the *Pathfinder Roleplaying Game Core Rulebook*). A typical lightly armored humanoid army has a Movement score of 2. A unit whose divisions have different speeds uses the speed of its slowest division.

Step 10: Scouting: A unit's ability to notice other armies is reflected in its Scouting score (see **Camouflage and Scouting^{UB}**). This bonus is equal to the Perception modifier of the creatures in the unit divided by 4, plus the LB (scout) if its commander.

Step 11: Camouflage: A unit's ability to evade notice by other armies is reflected in its Camouflage score. The Camouflage score (see **Camouflage and Scouting^{UB}**) of a unit is equal to 10 plus the Stealth modifier of the creatures comprising the unit divided by 4, adding the commander's LB (scout) bonus and applying the Camouflage modifier noted in **Table 3: Army Size^{UB}**. If a unit has Mounts, it uses the worse Stealth modifier of the riders or mounts.

Since the size of an individual creature is already reflected in its Stealth score, it is not separately applied as a modifier to a unit's Camouflage score. If no Stealth skill modifier is listed for a creature in its Bestiary entry, that modifier is equal to the creature's Dexterity modifier, modified for its armor and by -4 per size category larger than Medium, +4 per size category smaller than Medium.

Step 12: Unit name and home base: Each unit should have a name, which can be a simple functional title like "7th Armored Cavalry" or florid like "Alazan's Radiant Hussars." In addition, each unit should be assigned a home base, which must be a settlement; either the settlement where the soldiers comprising the army were recruited or the nearest settlement if they were recruited at a Fort. If a unit is destroyed, that settlement gains a permanent -1 Law penalty and there is a 25% chance during the next kingdom turn's Event Phase that the citizen's of the unit's home base will cause a Building Demand event asking that a Monument be erected in memory of the honored dead. If a unit disbands, the settlement gains a -2 Law modifier but there is no chance of a Building Demand.

FORMING AN ARMY

An army is simply a collection of units all fighting in concert according to a common battle plan. An army can be named (e.g., Northern Army, Guardians of the West) or numbered (e.g., 1st Army, 2nd Army), though it may not be if a kingdom has only a single army in the field. In any battle, however, a single designated character must act as the general of the army. This may or may not be the kingdom's General, who has overall responsibility for all military activity in the kingdom, but could as easily be another PC or NPC member of the kingdom's rulership team. A general should have good Charisma and many ranks in Profession (soldier). The general of the army and the unit commanders or other significant characters can provide a variety of Command Boons to the forces under their command, as described in *Pathfinder Roleplaying Game Ultimate Campaign* and *Ultimate Rulership* further expanded in this product. Some boons apply to an entire army, but most apply only to a single unit.

Each army is limited to a number of units equal to 3 plus the general's Charisma modifier. If the general has the Leadership feat, this number is increased by 1 or the Overwhelming Force Command Boon; these effects stack. The general oversees the combat from the Command Zone and does not directly participate in the battle, though she determines Strategy and Tactical Initiative during the course of the battle, with individual unit commanders choosing the Tactics and Command Boons they will use to make the general's strategy a success.

BATTLE PHASES AND COMBINED ARMS

Many of the subsections below contain an explanatory note about how the rules might be adjusted when using the Combined Arms combat system described in

this product. If not otherwise stated, the rules operate identically for units using the Combined Arms rules as they do for armies using the published rules.

Tactical Phase: The general in charge of each army makes a Profession (soldier) check; the individual unit commanders do not. Winning tactical initiative provides a bonus of +1 to MV and RV for all units under the general's command. In addition, since units are modular that means that combat is sequential rather than simultaneous. The commander that wins tactical initiative selects one unit to attack an enemy unit, followed by the enemy selecting one unit to attack in response. Attacks alternate from each commander until all units have attacked once. Unlike the standard rules, a unit that is destroyed, disabled, routed, or otherwise taken out of action before it has a chance to act forfeits its attack. If one side has more units than the other, when one side runs out of units to attack taking turns with its opponent, any leftover units from the larger army attack in succession until all have attacked.

Ranged Phase: Any unit with ranged weapons or an ability that grants it a ranged attack can make a ranged attack rather than a melee attack, and all ranged attacks are resolved during the ranged phase before proceeding the melee attacks, though some tactics provide exceptions to this rule. A unit cannot make a ranged attack if it is engaged. When a unit attacks, it picks an enemy unit as its target and rolls 1d20, adding its RV (including any modifiers). If the result equals or exceeds the DV of the target unit the attack is successful and inflicts a number of Casualties equal to the difference between your adjusted RV check and the target DV. The commander of the target unit assigns these Casualties to the divisions of his unit as he sees fit.

If your adjusted RV check fails to equal or exceed the target's DV, the defending army takes no damage. A natural 20 always indicates a successful attack, inflicting 1d6 Casualties on the target army, regardless of its DV (use the attack's normal damage if it exceeds the result of this roll). In addition, on a natural 20 the attacker assigns damage to the defending unit and its divisions as he wishes. On a natural 1, the attack automatically fails and the attacking unit inflicts 1d6 Casualties on itself and becomes fatigued.

Melee Phase: Resolving a melee attack between two units functions much like resolving a ranged attack in the Ranged phase, substituting MV for RV. However, melee combat is more inherently dangerous to attacker and defender alike. On a successful attack, the attacking and defending armies become engaged. More than one unit can be engaged with the same enemy unit at the same time. If an attack fails to overcome the defender's DV, both the attacking unit and the defending unit take 1d6-3 Casualties; these Casualties are not modified by any tactics, special attacks, or command boons used by either side, unless they explicitly state otherwise).

Rout Phase: The Rout phase proceeds as described in *Ultimate Battle*, but each unit has its own separate Morale score and makes its own Morale checks.

HEALING AFTER BATTLE

A unit that remains on the field or is able to retreat from it without being defeated (i.e., all of its divisions reduced to 0 hit points) can rest for 1 hour in order to regain hit points equal to 1/2 its ACR and automatically reduces the exhausted condition to fatigued. If the unit can rest for 8 additional hours without interruption, it regains hit points equal to its ACR and automatically removes the fatigued condition. Thereafter, a unit heals hit points equal to its ACR for every 24 hours of complete rest. Units that are marching, guarding prisoners, or performing other light-duty tasks heal half the normal amount of hit points (rounding down). Units that engage in a battle or that take damage from a forced march do not heal at all.

Whenever a unit heals, it can allocate the hit points it regained to its divisions as it chooses, including defeated divisions at 0 hit points, though not divisions which have been destroyed by taking damage when already at 0 hit points.

A unit that has been defeated but is able to exit the battlefield regains 1 hit point after 1 hour of rest. After this time, it can again function as a unit, including using the healing rules described above. If the unit is destroyed or disbanded, it cannot heal. The Magical Healing command boon or Healing Potions resource doubles the number of hit points regained by one unit during the first hour of its rest (or allows a defeated army to regain hit points equal to half its ACR after 1 hour of rest).

VICTORY AND AFTERMATH

The outcome for defeated combined arms units after a battle is the same as for armies using the standard rules, except that if a significant character or commander is captured and executed but their unit still exists, the unit immediately loses 1d4 points of Morale.

COMMANDERS

Commanders function for combined arms units the same way they function for armies as described

in *Ultimate Battle* and *Pathfinder Roleplaying Game Ultimate Campaign*, except that each leader commands a single unit on the field, which may be a solo unit or a combined unit comprised of several smaller divisions, up to a maximum of $3 + \text{the leader's Charisma modifier}$, with an additional +1 bonus if the leader has the Leadership feat. A unit can have a maximum of 5 divisions in any event.

COMMAND BOONS

Command boons function for combined arms units the same way they function for armies as described in *Ultimate Battle* and *Pathfinder Roleplaying Game Ultimate Campaign*, except as described below.

Permanent Boons: If a unit with a permanent boon loses one or more divisions and later replaces them with new soldiers, the new divisions benefit from any boon that the unit as a whole possesses. If the entire unit is destroyed or disbanded, the permanent boon is lost.

RECRUITING AN ARMY

The combined arms rules for units generally follow the rules for creating and managing armies as described in *Ultimate Battle*, *Ultimate Rulership*, and *Pathfinder Roleplaying Game Ultimate Campaign*, except as described below.

Standard Rules: Creating a combined arms unit as part of your Improvement Edict requires a Loyalty check, with a penalty equal to the ACR of the unit you intend to create. Likewise, if a unit has one or more missing divisions that have been destroyed, they can be replaced with an Improvement Edict. One edict restores all missing divisions in one unit, with a cost equal to 1/2 the unit's ACR per missing division. Creating units otherwise functions as creating armies.

Ultimate Rulership Rules: Using the Recruitment Edict rules from *Ultimate Rulership*, you can achieve a more granular level of recruitment and reinforcement. In most cases, this functions identically to the rules described in *Ultimate Battle*. In addition, a Recruitment Edict can be used to replace destroyed divisions within a combined arms unit.

TERRAIN

In warfare, the topography and terrain of a battle can have a huge impact. The standard rules assume a fairly even playing field for both armies and little in the way of impeding terrain. The following rules describe how to adapt a battlefield for greater variety.



Claiming the High Ground: Taking the high ground in standard mass combat rules is discussed in *Ultimate Battle*. If using the combined arms rules, each unit that acts can attempt to claim the high ground for its own, as long as it is not engaged (or is able to disengage). If one of your units is vacating the high ground, you can ready one of your own units to switch places with it. The unit you want to insert into the high ground must use one of the following Tactics: Cautious Combat, Covering Fire, Defensive Wall, Full Defense, Screening Defense.

SQUADRONS AND FLEET BATTLES

You can use a simplified variant of the Combined Arms rules to play out aerial or naval battles that are not directly connected to land battles, treating each ship or aircraft as a division and forming them into squadrons of 2-5 ships or aircraft, and then forming multiple squadrons into a combined fleet or air force. Squadrons follow the same rules for units in the Combined Arms rules described above. The crews, siege weapons, and other special features of each squadron do not play a part in this method of resolving fleet battles, as all are subsumed into the actions of the ships themselves.

Initiative: The overall commander of each fleet or air force rolls 1d20 and adds her LB or LB (naval). The winner has tactical advantage for that Battle Phase and attacks first. After that initial attack, each commander takes turns having a squadron attack. If one side has more squadrons than the other, then any excess squadrons attack after all of the opponents squadrons have completed their attacks.

Strategy, Tactics, and Command: You can use all standard rules for these elements of Combined Arms.

Fast Wreckage: Each ship has a total number of hit points equal to 1/10 its Wreck or Sunk hit point total. If a ship or aircraft suffers no ill effects until its hit points reach 0, at which point it is considered defeated (resulting in a -1 penalty to its squadron's attack rolls and damage). If the ship or aircraft takes an additional point of damage while already defeated, it is destroyed.

Simplified Combat: Rather than separate Ranged and Melee Phase, all combat is combined into a single d20 roll modified by the commander's LB or LB (naval), modified by Tactics, Strategy, and Command Boons, against the DV of the ships in the target squadron. If the roll succeeds, the target squadron takes 1d6 points of damage, plus 1 point per ship in the attacking squadron. This damage is distributed as the defender wishes unless the attacker rolls a natural 20, in which case the attacker chooses which ships in the target squadron are damaged. If a squadron is destroyed before it has had a chance to attack does not get to attack.

Routs, Victory, and Defeat: The Rout Phase is handled normally for Combined Arms. Each missing ship in a squadron results in a -1 penalty for the remainder of the squadron. When a squadron fails its Morale check, it routs normally. A quick fleet battle concludes when all units on one side have routed or been destroyed.

WAR IN THE SKY

In a fantasy campaign, war takes on an entirely new dimension that breaks far away from the traditional tropes of ancient and medieval Earth. The introduction of magic itself lends a much more modern tactical feel to mass combat in a fantasy campaign, with magic substituting for command, control, artillery, and unconventional weapons, but even in a low-magic campaign the existence of flying foes introduces an entirely different set of circumstances that the Greek phalanx, the Roman legion, the Turkish janissaries, and the knights of the Crusades never had to worry about.

AERIAL OPERATIONS

Strictly speaking, combat in the air is not terribly different from combat on the ground, as it uses the same concept of battlefield zones introduced in *Ultimate Battle* from Legendary Games. However, instead the Melee, Ranged, Camp, and Command Zones described in that product apply a bit differently. The Command Zone functions as described in *Ultimate Battle*, though in most battles there will be no separate Command Zone for aerial units, as the command structure may be lodged in a headquarters on the ground (or on board a ship). The Camp Zone typically features aerial units that are being held in reserve away from the battlefield, or trying to escape it. They may be congregating at nearby open fields or aeries awaiting their turn to join the battle. In terms of Melee and Ranged Zones, units at different altitude levels are always considered to be in the Ranged Zone with respect to units at a different altitude level. Creatures must be in the same altitude level to attack in the Melee Phase or to become engaged with one another.

Altitude Levels: Aerial combat involves movement in three dimensions in a way that is hard to model in the same kind of spatial concepts that operate on a conventional land battlefield. Flying enemies just a few paces overhead are outside the effective reach of land-bound melee weapons, and even ranged attacks are at somewhat of a disadvantage being launched against the force of gravity. At the same time, creatures in the air not only have mobility on their side but also have a commanding vantage point over the battle, using raining deadly missiles (whether launched or merely dropped) from above on units below. Much like the Battle Zone rules in *Ultimate Battle*, these altitude levels are abstract and do not represent specific physical distance. Instead, they provide a convenient shorthand for determining the relative position of flying creatures in and around a battlefield.

Ground Level: Many if not most flying creatures use their flight to move swiftly from place to place and to obtain an advantageous view of the surround, but to actually engage in combat they must descend near



enough to ground level to make use of their natural or manufactured weapon attacks. An aerial unit must move at ground level in order to attack or be attacked in melee.

Low Altitude: Units in this altitude zone are well out of range of melee attacks but can attack with (and be attacked by) ordinary ranged attacks. Aerial units can attack at this range with dropped items with reasonable accuracy.

Medium Altitude: Units in this altitude zone fly on the fringes of the battle zone, able to attack with (and be attacked by) siege weapons and other effects with very long range but otherwise out of reach of standard ranged attacks. Aerial units at this altitude can attack with dropped items but with little accuracy.

High Altitude: Units in this altitude zone are too far away to effectively attack units on the ground or be attacked by them.

Aerial Reconnaissance: In Earth's history, the first military application of airborne units was in the form of observation balloons, allowing commanders to get a good look at enemy troop dispositions from high above. If one side in a battle has aerial units and the other does not, all armies on its side gain a +1 bonus to their OM and DV and a +4 bonus on Scouting checks (see **Camouflage and Scouting^{UB}**) to spot enemy armies

on the battlefield. At medium altitude, an aerial unit gains a +2 bonus on Scouting checks to spot enemy armies anywhere in the same hex, even if they are not on the battlefield. At high altitude, an aerial unit gains a +1 bonus on Scouting checks to spot enemy armies in the same hex or any adjacent hex.

Changing Altitude: While aerial combat is assumed to be fluid and dynamic, with the ability to rapidly change location at high speed, the abstract altitude levels described above represent where an aerial unit is spending the majority of its time during a given Battle Phase. Each time a new Battle Phase begins, an aerial units can adjust its altitude by one step, or by two steps with a successful Morale check.

Visibility: While aerial units provide spotting assistance to their allies, they are no less vulnerable to difficulties with visibility than are forces on the ground. They take the same penalties due to poor visibility that ground units take (see **Visibility^{UB}**), and they have the same chance of damaging allied units when making ranged attacks in conditions of reduced visibility (see **Fog of War^{UB}**).

Weather: Aerial units are more vulnerable to extremes of weather than are units on the ground. As such, any penalties that accrue to units due to **Weather^{UB}** are increased by 1.

WIND EFFECTS

Aerial units are vulnerable to strong winds, and aerial units are assumed to be spending some of their movement and maneuvering during the course of a battle just to counteract the force of the wind. However, ongoing winds have a cumulative effect on aerial units.

TABLE 1: WIND EFFECTS (AERIAL)

WIND STRENGTH	SPEED	DMG	PILOTING
<i>Light</i>	-	-	-
<i>Moderate</i>	1 hex	1	-1
<i>Strong</i>	2 hexes	1d3	-2
<i>Severe</i>	4 hexes	1d6	-4
<i>Windstorm</i>	6 hexes	2d6	-8
<i>Hurricane</i>	12 hexes	4d6	-16
<i>Tornado</i>	24 hexes	destroyed	impossible

Wind Speed: This refers to Table 13-10: Wind Effects in the *Pathfinder Roleplaying Game Core Rulebook*. To have this effect, the relevant wind speed must be present throughout the entire battle phase (lasting 1d6 hours).

Speed: Aerial units moving in the same direction as the wind add this amount to their daily speed; those moving against it subtract this amount from their daily speed. If this reduces their speed to zero, the unit is unable to make progress against the wind. If this reduces the unit's speed below zero, the unit is forced to move a number of hexes equal to the difference between its own speed and the wind's speed in the direction of the wind. The unit can Avoid this forced movement by remaining on the ground. A smaller unit being carried by a larger unit moves with the largest unit.

Drifting Away: An aerial unit with a speed listed as **drift** is forced to move this number of hexes at the end of each Battle Phase.

Tacking: An aerial unit can move against the wind with a successful Morale check, adjusted by its Maneuverability. If the check succeeds, the unit treats the wind strength as one category less severe for the purpose of its speed, plus one additional category less severe for every 5 points by which the check exceeds the DC. Tacking is very tiring, however, and the unit automatically becomes fatigued after spending a day tacking.

Piloting: Aerial units take a penalty on Airworthiness and Maneuverability in high winds. This affects Morale checks made to maneuver and may preclude the use of certain aerial tactics that require a minimum maneuverability rating.

Damage: Operating in high winds places strain on aerial units. At the end of each Battle Phase (or each day of overland travel), an aerial unit must succeed on a Morale check or take the listed damage. An

aerial unit that takes damage from high winds must make a second Morale check or become fatigued (or exhausted, if already fatigued). Aircraft crews add their Airworthiness modifier to this check.

Exceptions: A unit comprised of creatures with the air subtype treat wind effects as one step less severe. A unit comprised of outsiders with the air subtype treats wind effects as three steps less severe.

In terms of aircraft, a flying carpet or war rocket treats wind effects as one step less severe. A flying citadel treats wind effects as three steps less severe.

AERIAL UNITS

Most aerial units in a mass combat situation are comprised of creatures that have the power of flight, whether with wings or through the power of their magic. Ordinary soldiers mounted on griffons, pegasi, dragons, or other flying creatures follow the rules for mounted combat outlined in *Pathfinder Roleplaying Game Ultimate Campaign* and in *Ultimate Battle* in terms of unit construction. In addition to flying creatures, however, fantasy battles can make use of fantastic aircraft.

Chariots and Howdahs: Any suitable flying creature can become a sort of flying vehicle by mounting a howdah on its back or having a winged chariot pulled behind it. These howdahs and chariots do not use the aircraft rules that follow but instead follow the same rules as their land-bound equivalents, as described in *Ultimate Battle*. If the flying creatures bearing these chariots or howdahs are routed, their riders or passengers must succeed at a Morale check or be treated as the crew of an aircraft that has crashed. If the aerial creatures of their unit are killed, the riders automatically crash.

Maneuverability: Aircraft have a defined maneuverability modifier based on their type. When aerial units comprised of flying creatures must make a Morale check adjusted by their size and their maneuverability class, use the following table to determine their modifier:

TABLE 2: MANEUVERABILITY MODIFIERS (AERIAL)

MODIFIER	SIZE	MANEUVERABILITY
+4	Small or smaller	Perfect
+2	Medium	Good
+1	Large	-
0	Huge	Average
-1	Gargantuan	Poor
-2	Colossal	Clumsy

Modifiers apply for both size and maneuverability class and stack with each other and any other modifiers.

Constructing Aerial Units: Aerial units requires a number of specialized units to be present in the city where they are built. These buildings are

described in *Pathfinder Roleplaying Game Ultimate Campaign* and in *Ultimate Rulership*. Building an aircraft takes 1 month per 5 BP (or fraction thereof) of its cost.

TABLE 3: AIRCRAFT CONSTRUCTION REQUIREMENTS

AIRCRAFT	BUILDINGS REQUIRED
Airship	<i>Aerie, Caster's Tower, Exotic Artisan</i>
Alchemical Dragon	<i>Aerie, Alchemist, Caster's Tower, Exotic Artisan</i>
Balloon	<i>Aerie, Exotic Artisan</i>
Carrion Carrier	<i>Aerie, Caster's Tower or Cathedral, Exotic Artisan, Graveyard</i>
Drogue Wing	<i>Aerie, Exotic Artisan</i>
Floating Citadel	<i>Aerie, Alchemist, Brickyard, Exotic Artisan, Magical Academy, Military Academy, Observatory</i>
Flying Carpet	<i>Aerie, Exotic Artisan, Foreign Quarter or Magic Shop</i>
Glider	<i>Aerie, Exotic Artisan</i>
Solar Sailer	<i>Aerie, Alchemist, Exotic Artisan, Foundry, Magical Academy, Observatory</i>
War Rocket	<i>Aerie, Alchemist, Caster's Tower, Exotic Artisan, Foundry, Magic Shop, Military Academy</i>

AIRCRAFT DESCRIPTIONS

In a fantasy RPG, aircraft can be almost anything, from simple lighter-than-air craft and gliders to flying carpets, cloud castles, winged chariots, and even retro-punk technomagical devices powered by alchemical engines or solar sails.

Airship: This vessel is similar to a smallish longship but is held aloft by a massive balloon and guided by a contraption of sails and rudders.

Alchemical Dragon: The wooden body and metallic frame of this craft is borne aloft by arcane alchemical engines.

Balloon: This lighter-than-air craft is lifted by hot air and alchemical reagents producing buoyant gases. Lacking propulsion, the balloon carries an observation platform or basket beneath it, allowing pilot and passengers an advantageous view of the surround, though they are vulnerable to being blown away if not securely tethered to the ground (or another aircraft).

Carrion Carrier: This grotesque necrocrafted creation resembles a massive headless vulture or dragon, its tattered wings allowing a clumsy sort of transport within the ragged remnant of its ribcage and hollowed-out interior.

Drogue Wing: These personal gliders are sometimes used by cliff-dwelling or skyfaring races to range out into the lands below to harry those who would dare oppose them.

Floating Citadel: These aerial watchtowers float upon islands in the clouds, mounted either upon floating rocks enchanted to ride the skyways or on solidified clumps of cloud-stuff.

Flying Carpet: These enchanted rugs serve in some places as the floating firing platforms of skywarding sentinels and special couriers. In technomagical societies, such small hovering platforms might be called **sky sleds** or **rocket sleds** rather than the traditional flying carpet *per se*.

Glider: These aircraft ferry both goods and soldiers over long distances riding on the currents of the winds.

Solar Sailer: This technomagical conveyance of crystalline panels and vanes and frames of burnished metal converts the energies of the sun and stars into powerful lift to bear aloft a deck suitable for soldiers as well as cargo.

War Rocket: This brazen aerial dreadnought boasts fantastic speed as well as a bristling arsenal of weaponry, able to levitate in place as a floating battery or to chase down those who try to flee.

DV: The Defense Value (DV) for attacks made against the aircraft itself.

Grounded Units: The DV of an aircraft that is not flying is reduced by 4. This does not apply to units flying at ground level, but only to those that have not taken off or have been forced to the ground.



TABLE 4: AIRCRAFT STATISTICS, COMBAT

AIRCRAFT TYPE	DV	FRAGILE	COVER	DMG	STALL	CRASH	AIRWORTHINESS	MANEUVER
<i>Airship</i>	15	yes	+2	15	30	45	+2	-4
<i>Alchemical Dragon</i>	20	yes	+3	20	40	60	+2	-2
<i>Balloon</i>	5	yes	-	2	4	6	-5	-10
<i>Carrion Carrier</i>	13	no	+1	5	10	15	+0	+0
<i>Drogue Wing</i>	8	yes	-	0	0	1	-2	+4
<i>Floating Citadel</i>	30	no	+5	50	100	150	+10	-5
<i>Flying Carpet</i>	10	no	-	3	6	9	+2	+10
<i>Glider</i>	11	yes	+1	4	8	12	+0	+0
<i>Solar Sailer</i>	15	yes	+2	25	50	75	+2	-2
<i>War Rocket</i>	25	no	+4	30	60	90	+5	+0

Fragile: Most aircraft are relatively fragile when attacked with heavy weapons, splintering and shattering their structural integrity and delicate mechanisms. An aircraft noted to be fragile takes double damage from attacks with siege weapons, including siege weapons used by other aircraft.

Cover: If an attacking unit chooses to attack a unit carried on the target aircraft rather than the aircraft itself, the unit adds the listed modifier to its own DV against ranged attacks and against melee attacks when the units are not engaged. If already engaged with another aerial unit, this bonus no longer applies.

Dmg: When this amount of damage has been dealt to the aircraft, its mobility and stability are impaired. Its speed is reduced by 1 and it takes a -2 penalty its Airworthiness and Maneuver modifiers.

Stall: When this amount of damage has been dealt to the aircraft, its flight becomes erratic and unstable. Its penalty on Airworthiness and Maneuverability increases to -4, and at the end of each Battle Phase (or each day of overland travel) its crew must succeed on a Morale check or be forced to land. If the aircraft is at low altitude or ground level, it can land without difficulty. If it is at medium or high altitude, it must succeed at a second Morale check or it crashes when

attempting to land. If a natural 1 is rolled on any Morale check to stay aloft, the aircraft immediately crashes.

Crash: When this amount of damage has been dealt to the aircraft, it is destroyed and any crew or passengers unable to fly on their own fall. If the aircraft is at ground level, those units take 2d6 points of damage and are fatigued. If the aircraft is at low altitude, those units take 4d6 points of damage and are exhausted. If the aircraft crashes from medium or high altitude, all crew and passengers are killed.

Airworthiness: This modifier applies on Morale checks made to stay safely aloft.

Maneuver: This modifier applies on Morale checks made to make tactical maneuvers during battle, including engaging or disengaging from opposing units.

Cost: The cost in Building Points (BP) to construct an aircraft of this type.

Consumption: Aircraft add 1/10 their Cost (rounding up) to the kingdom's monthly Consumption, although aircraft with a Cost under 5 BP have no Consumption cost. This does not include Consumption paid for their crews.

TABLE 5: AIRCRAFT STATISTICS, GENERAL

SHIP TYPE	COST	CREW	PASS	CARGO	SPACES	SPEED	CLIMB	HOVER
<i>Airship</i>	40 BP	20	50	20 tons	2	6 hexes	yes	yes
<i>Alchemical Dragon</i>	50 BP	10	20	5 tons	2	6 hexes	yes	no
<i>Balloon</i>	1 BP	1	5	2 tons	-	drift	yes	yes
<i>Carrion Carrier</i>	10 BP	1	20	2 tons	-	2 hexes	yes	no
<i>Drogue Wing</i>	1/2 BP	1	1	-	-	glide	no	no
<i>Floating Citadel</i>	200 BP	10	200	100 tons	8	2 hexes	yes	yes
<i>Flying Carpet</i>	15 BP	1	5	1 ton	-	3 hexes	yes	yes
<i>Glider</i>	2 BP	1	10	1 ton	-	glide	no	no
<i>Solar Sailer</i>	100 BP	20	20	50 tons	2	8 hexes	yes	yes
<i>War Rocket</i>	150 BP	20	50	20 tons	4	12 hexes	yes	no

Crew: The number of pilots, navigators, and engineers needed to crew the aircraft. A typical aircraft's crew is comprised of 3rd-level experts, which like a unit of artillerists counts as an auxiliary army and counts against the kingdom's **Manpower^{UR}** but not against its total number of armies. Up to half the aircraft's crew can serve as an artillerist unit to man any siege weapons on board; other artillerists must be carried as passengers.

Pass.: The number of passengers the ship can carry. This number is halved if the passengers are Large; for mounted units with Large mounts, each mount and its rider counts as one Large creature.

Cargo: The number of tons of cargo that can be carried by the ship. If you are using aircraft to establish a trade route with a Trade Edict (as described in the Optional Kingdom Rules section of Chapter 4 of *Pathfinder Roleplaying Game Ultimate Campaign*), each BP of food or raw materials weighs 20 tons, each BP of goods weighs 10 tons, and each BP of luxuries weighs 1 ton.

Spaces: The number of spaces of siege weapon batteries that can be mounted on the aircraft (see Siege Weapons). No siege weapon battery can use more than half of the aircraft's available spaces (e.g., a war rocket can carry up to 4 total spaces of siege weapons, but can mount only Huge siege weapons (requiring 2 spaces) or Large siege weapons (requiring 1 space)).

Speed: The daily speed of the aircraft in terms of overland movement across 12-mile hexes.

Drift: This aircraft has no propulsion system of its own and drifts with the wind. It may be tethered to the ground so that it does not fly away, though its tether can be broken as a free action by any enemy army that enters the Camp Zone or by any unit that devotes its attack in the Melee Phase to doing so.

Aircraft with a drift speed cannot use tactics that require rapid movement, including (but not limited to) Dive Bombing, Dogfighting, Soaring Sweep, Spectacular Flyover, and Strafing Run.

Glide: This aircraft has no propulsion system but can glide for considerable distances, depending on the height from which it is launched. This aircraft can glide 1 hex if launched from low altitude, 2 hexes from medium altitude, or 3 hexes from high altitude. This launch can be from the top of a structure or terrain feature as well as from a larger aircraft already aloft.

Climb: Not all aircraft are capable of climbing. An aircraft that cannot climb may stay at its starting altitude and can descend, but it cannot regain altitude once lost.

Hover: Some aircraft can maintain a steady position in midair without needing to move.

AERIAL COMBAT

Combat in the air functions similarly to combat on the ground, though a number of special rules apply. Rules for elevation, weather conditions, and aerial units are described above. The section that follows presents a series of rules specifically relevant to aerial units in a mass battle situation.

AERIAL TACTICS

Aerial armies and units follow most of the same rules as their land-bound equivalents when it comes to strategy and tactics. This includes the ability to make use of most of the standard tactics that are appropriate for them, including Cautious Combat, False Retreat, Full Defense, Sniper Support, Spellbreaker, Taunt, and Withdraw from *Pathfinder Roleplaying Game Ultimate Campaign* and Covering Fire, Furious Charge, Feint, Overwhelming Onslaught, Pincer Maneuver, Pursuit, Retreat, Screening Defense, Siegebreaker, Skirmishers, and Strafing Skirmishers from *Ultimate Battle*. Aerial units with the ability to hover also can use the Defensive Wall, Pike Square, and Volley tactics. In addition to these standard tactics, aerial units have a number of additional tactical options available to them.

Airlift: An aerial unit can forgo making a melee attack in order to transport a ground-based unit into or out of the battlefield. The aerial unit must be capable of carrying passengers, whether on an aircraft or using creatures at least one size category larger than the creatures being carried, and the total number of creatures carried cannot exceed the passenger capacity of the aircraft or one-half the number of creatures in the aerial unit. An aerial unit can carry passengers of the same size as the creatures comprising the aerial unit, but the number it can carry is halved.

If you attempt to airlift an allied unit into a defended fortification or city, the defending armies are entitled to make a Scouting check (see **Scouting and Camouflage^{UB}**) to spot your army. If they do so, any defending unit that is not engaged can attempt to oppose your landing. You must resolve your attempted landing as a **boarding action** (see below), applying any bonuses for the defending unit's fortifications (see **Defense** modifier for buildings^{UR}). If you are not spotted, you can land unopposed and the army you airlifted can move and attack in the melee phase. You and the army you transport must begin the Battle Phase in the Ranged Zone.

If you are attempting to remove an allied unit from the battlefield, you can do so automatically if the unit is not engaged. If the unit is engaged, you and your allied unit must make Morale checks opposed by the Morale check of any enemy units engaged with the allied unit. If your Morale checks exceed all checks made by the opposing units, the airlift is

successful and you and your allied unit can retreat to the Camp Zone at the end of the Battle Phase. If one of your checks exceeds all of the enemy's checks but the other does not, the allied unit remains engaged but the aerial unit can retreat to the Ranged Zone. If both of your checks fail to beat all of the enemy unit Morale checks, the aerial unit ends its turn flying at Ground Level and the allied unit remains engaged. The aerial unit does not become engaged unless an enemy unit makes a successful melee attack against it. *Requirement:* aerial unit able to carry passengers.

Boarding Action: Your aerial unit (including units that are passengers on an aircraft) attempt to board another aircraft. Your unit and the target unit make opposed Morale checks, adjusted by Maneuverability. If your unit succeeds, your unit (if a unit of flying creatures) or crew or passengers (if an aircraft) can board the opponent aircraft and make a melee attack during the Melee phase. The defending unit adds the aircraft's Cover modifier to its DV against this attack, as well as on Morale checks to disengage.

If the melee attack fails, your boarding action is repulsed and the crew or passengers aboard the opponent's aircraft get to choose whether or not you remain engaged. They can choose to make a counter-attack against you in the Melee phase without becoming engaged with your unit. If their attack succeeds and they choose not to become engaged with you, your unit must succeed on a Morale check or take $1d4$ points of additional damage as some members of your unit are pushed overboard and lost during your retreat. *Requirement:* aerial unit.

Bombing: Your strong fliers can carry heavy objects aloft and drop them onto armies far below. An aerial unit of Large or larger creatures can make a ranged attack in the Ranged Phase with dropped bombs, though after dropping their load they must withdraw to the Camp Zone to replenish their supply. Aircraft can devote up to one-half of their cargo payload to bombs and can make as many bombing attacks as they wish (one per Ranged Phase) until their ammunition is exhausted. A bombing attack can be used as a bombardment, special bombardment, volley, or scatter volley attack (see *Siege Tactics*). If used to attack an enemy unit, use the following table.

TABLE 6: BOMBING

CREATURE SIZE	TONS OF CARGO	RV	DAMAGE
Large	1	+0	$1d4$
Huge	5	-1	$1d6$
Gargantuan	10	-2	$1d8$
Colossal	20	-4	$1d10$

This table assumes bombing is occurring at low altitude. Bombing can be done from medium altitude, resulting in a -4 penalty to RV but dealing double

normal damage. If the target unit is engaged with a friendly unit, your allied unit automatically takes friendly fire damage (see **Friendly Fire^{UB}**) from a bombing attack performed at medium altitude. *Requirement:* flying unit of Large or larger creatures, or aircraft with at least 1 ton of cargo capacity.

Combat Air Patrol: Your unit is always ready to meet any challenge from airborne enemies, keeping your eyes on the skies rather than worrying about the battle below. You gain a +2 bonus on Scouting checks to spot enemy flying units and a +2 DV bonus against attacks by flying units. You cannot make attacks against armies on the ground when using this tactic. *Requirement:* flying unit at medium or high altitude level.

Cut the Rigging: Your unit attacks the target's propulsion and guidance system in an attempt to bring the aircraft down or impede its movement. You take a -2 penalty on your OM, MV, and RV when making this attack, and a successful attack deals only half normal damage. However, if the attack succeeds your target must succeed on a Morale check (modified by the aircraft's Airworthiness) or its rigging is damaged. If the aircraft is already damaged, a failed Morale check results in a stall. If already stalled, a failed Morale check causes the aircraft to crash. See **Table 6: Aircraft Combat Statistics** for the effects of the damage, stalling, or crashing.

Dive Bombing: This style of bombing involves carrying bombs much closer in, from a high trajectory, in order to deliver greater force and accuracy though at a somewhat greater risk to the dive bomber. Dive bombing works similarly to bombing above but grants a +2 bonus to RV and a +1 bonus to damage. The creature or aircraft performing this tactic takes a -2 penalty to DV and on Morale checks made to disengage until the beginning of the next Battle Phase. *Requirement:* maneuverability class poor or better, or Maneuver score of -2 or better for aircraft.

Dogfighting: You have honed your skills at close-in flying and combat with flying foes, both to attack and to escape. You gain a +2 bonus on OM (or MV) against flying opponents and a +2 bonus on Morale checks made to disengage against flying opponents. *Requirement:* maneuverability class MVerage or better for creatures, or Maneuver score of 0 or better for aircraft.

Fly in Low: Your squadrons hug the ground and use the natural contours of the land to hide your approach vector. Opposing armies take a -2 penalty on Scouting checks made to spot you. If you attack a unit on the ground that fails to spot you, you can make a melee attack during the Melee Phase without becoming engaged with that unit. If you are engaged with an aerial unit at low altitude or ground level, you gain a +1 bonus on Morale checks to disengage with them. Even if you fail this Morale check, you move to ground level and the enemy flying unit must also come down to ground level or else allow you to disengage.

Requirement: flying unit at ground level (or low altitude, if disengaging from an enemy flying unit).

Out of the Sun: Your squadrons have trained to fly as high as possible, placing the sun behind them so its glare hides their approach as they plunge down into battle on a careening plummet. Enemy units take a -4 penalty on Scouting checks to locate your unit. If you attack a unit that does not spot you, you gain a +2 bonus on OM, MV, and RV against that unit. If another unit has already used this tactic during the same Battle Phase, you gain only one-half the normal benefit. **Requirement:** flying unit at high altitude.

Soaring Sweep: Your unit is trained in making swift fly-by attacks against opponents on the ground, swooping across the battlefield and harrying the enemy. Your unit can attack two non-mounted armies in a single Battle phase. Your unit gains -4 OM and -2 DV for the remainder of the Battle phase and your attacks deal only half damage, but you are not considered engaged after attacking a ground-bound unit. **Requirement:** flying unit.

Spectacular Flyover: Your unit engages in daring aerobatics that distract your enemies and bring heart to your allies. Any enemy armies whose ACR is lower than yours take a -1 penalty to RV and on opposed Morale checks against any of your allied units (though not against you). In addition, you can choose one allied unit to gain a +1 bonus on all Morale checks until the beginning of the next Battle Phase. **Requirement:** flying unit with ACR of at least 5.

Strafing Run: Your unit knows how to fly low over the battlefield and riddle other units with ranged attacks. Your unit can attack two armies on the ground in a single Battle phase during the Ranged Phase. Your unit gains -2 RV and -2 DV for the remainder of the Battle phase and your attacks deal only half damage. If a unit you attack during a strafing run is engaged with a friendly unit, you automatically deal 1 point of friendly fire damage to that allied unit. You cannot attack in the Melee phase after making a strafing run. **Requirement:** flying unit at low altitude or ground level with ranged attack capability.

Suicide Smash: Your unit crashes its aircraft into the target, using the craft itself as a weapon. This functions like dive bombing, but you use your OM or MV instead of your RV, and if the attack hits you deal double damage to the target structure or unit. The crew and passengers of the aircraft are killed on impact. **Requirement:** aircraft with crew.

FIGHTING UNITS ON THE GROUND

While aerial units spend a good amount of their time dealing with the aerial assets of the opposing army, at some point those in the sky will turn their attention onto those below. Aerial armies or units can always land and engage as a normal ground-

bound army if they wish, or use hit and run tactics such as Skirmishers and Strafing Skirmishers (see **Tactics^{UB}**) to attack and withdraw without becoming engaged with targets at ground level, in addition to the tactics described above.

Ranged Attacks against Aerial Units: Gravity itself impedes ranged attacks against units in the air. There is no penalty for attacking flying units at ground level; however, ranged attacks with standard ranged weapons take a -2 penalty on RV against flying units at low altitude and are useless against flying units at medium and high elevation. This also applies to indirect fire siege weapons, such as catapults, bombards, and trebuchets. Direct-fire siege weapons and equivalent long-range magical attacks take no penalty when attacking units at ground level or low altitude and a -2 penalty against aerial units at medium altitude, but aerial units at high altitude remain beyond their reach.

Closed and Open Formation: On a conventional battlefield, it is usually to the advantage of ground troops to cluster closely together for mutual support, maximizing the cover afforded by barriers and landforms and allowing them to concentrate their attacks with overwhelming strength. However, when aerial combat is introduced this becomes a more dangerous proposition. Falling objects, whether heavy single objects, scattered smaller objects, explosives, or other unconventional weapons, can easily circumvent ground-level barriers and devastate tightly packed clusters of soldiers.

As a result, in a world where flying foes are--if not exactly common--certainly a known quantity, successful commanders have developed strategies to help blunt the effectiveness of aerial opponents. The simplest strategy is to spread out their units, moving individual soldiers farther apart and giving them room to maneuver and react to danger from every direction, including from directly above.

Changing from open to closed formation is a choice that is made at the beginning of a battle, but it can be changed at the beginning of each Battle Phase thereafter, during the Tactical Phase. Shifting formation between open and closed is similar to changing **Strategy^{UB}** and does not require a Morale check if the unit maintains the same Strategy it employed in the previous Battle Phase. If it attempts to change its Strategy and its formation during the same Tactical phase, it must succeed at a Morale check as if it had tried to change its Strategy by more than one step.

Other Tactics for Ground Units: The following special tactics are used by units on the ground as countermeasures that are especially effective against flying units.

Camouflage Netting: Your unit covers itself with artificial vegetation and covers of cloth and net that screen them off from notice or easy attack by flying



foes. The DC to spot your unit with Scouting checks is increased by 1, and you also gain a +1 DV bonus against melee attacks by aerial enemies. You gain a +1 bonus on Morale checks to avoid becoming engaged with an aerial unit, and they take a -1 penalty on Morale checks to avoid becoming engaged by you, as the same screens you use can be triggered to trap flying units that venture too near. You must be using the Hold Firm or Cautious Advance strategy when using Camouflage Netting and cannot use any tactics that require sudden or swift movement (GM's discretion). *Requirement:* none.

Dig In: Your unit digs itself foxholes and slit trenches that provide cover against aerial attackers as well as ground-bound enemies. You gain a +2 bonus on DV against ranged attacks and +1 to DV against melee attacks, though you take a -1 penalty on OM, RV, and MV. In addition, your speed is reduced by 1 during any Battle Phase in which you construct or use these shelters, and you take a -2 penalty on Morale checks made to retreat or disengage. You must be using the Hold Firm or Cautious Advance strategy when using Dig In and cannot use any tactics that require sudden or swift movement (GM's discretion). *Requirement:* none.

Flak: Your unit keeps its eyes focused on the skies, with ranged weapons at the ready. You gain a +2 bonus on DV against attacks by flying units. In addition, you may delay your attack from the Ranged phase to attack an aerial unit that attacks you or an ally during the Melee phase. You resolve your ranged attack before their melee attack, with a +2 bonus to RV if the aerial unit attacks you. If your attack hits, the aerial unit must succeed on a Morale check (modified by its Airworthiness) or take a -1 penalty on OM, MV, RV, DV, Speed, and Maneuverability for the remainder of the battle.

You cannot attack in the Melee phase when using this tactic unless you are engaged with an enemy unit (including a unit which attacked and engaged you during the current Battle Phase), in which case you take a -4 penalty on OM and MV and deal only half damage on a successful attack. *Requirement:* ranged attack capability.

Grapnels: Your unit uses grappling hooks and ropes, either hand-thrown or launched from crossbows or siege weapons, to climb up into aircraft or try to bring them to the ground. You take a -2 penalty on your ranged attack against an aircraft flying at ground level and a -5 penalty against an aircraft at low altitude. You cannot use this tactic against aircraft at medium or high altitude.

If your ranged attack succeeds, you deal no damage but can attempt use a Boarding Action or Cut the Rigging attack against the vessel and its passengers and crew. Because you need to climb up to the vessel during this attack, you take a -5 penalty on your OM and MV as well as on opposed Morale checks while using those tactics. These penalties are halved if the creatures comprising your unit have a climb speed. *Requirement:* cannot have medium or heavy armor, ranged weapons (not merely ranged attack capability).

WAR AT SEA

Historically speaking, battles at sea were nearly as important as battles on land just because of the outsized importance that control of the waterways has always had on commerce, communication, and transport. Cities and fortifications sprang up around water both to take advantage of the natural barriers they provide but also to deny free passage to their rivals. Control of the waters, whether on rivers, lakes, or ocean sea lanes, is a critically important element in a holistic view of warfare.

Naval engagements are a much closer approximation in a fantasy RPG to their real-world equivalents, with the primary anachronisms being the decision of whether to incorporate gunpowder weapons and how to integrate magical artillery alongside weapons powered by tension and torsion. More tellingly, of course, naval combat requires the integration of traditional ships under oar and sail and the crews and soldiers that inhabit their decks with savage sea monsters of every description. The presence of water-breathing sentient races and monsters also brings the realities of submarine warfare into play in an RPG campaign in an analogous way to the elevation of aerial combat through various elevation levels. A battle at sea may take place primarily at the surface, but it may be joined on multiple levels by battles in the heavens above and the deeps below.

NAVAL OPERATIONS

Naval battles are similar in many ways to ground combat, as long as all of the combatants are operating in the same plane, like a fleet of ships fighting another fleet of ships. Unlike aerial battles, which always occur in three dimensions, sea battles *might* have that added level of complexity, but it is not always the case.

Sea Level: When all combatants are operating on the surface of the water, active participants operate in the same zones described in *Ultimate Battle*.

Melee: Vessels and creatures in the melee zone are considered to be engaged in active boarding actions against one another, either from ramming and coming aside with bridges or by swinging from yardarms across onto the decks of enemy ships. Aquatic monsters operating at this level are considered to be clambering up the sides of a ship or reaching into it from the water and directly engaging the crew.

Ranged: Most shipboard combat occurs at this range, either with standard ranged weapons in the hands of their crews or with siege weapons.

Camp: This zone represents ships hanging back from active participation in the battle. It may include transport and supply ships, damaged vessels limping toward safety, or simply ships being held in strategic reserve. Ships considered in the Camp Zone may still be targeted with siege weapons, and enemy ships can make a concerted effort to close with them and prevent their escape.

Command: The Command Zone represents the flagships of the respective fleets. While there is an element of realism to suppose that any ship in the enemy fleet might be targeted at any time, the same rules of dramatic tension and abstraction apply in a fleet engagement as they do in a land battle, and the enemy commanders are generally assumed to survive to the endgame of any naval battle. When the Command Zone is overrun, enemy commanders can be engaged directly by the PCs using standard Pathfinder combat rules, or can be captured or otherwise dealt with as described in *Ultimate Battle*.

Depth Levels: When dealing with aquatic creatures or unusual naval units, naval battles can suddenly become a lot more complex, as some units in a battle may be operating exclusively on the surface but others may not have that limitation. When a battle involves one or more units that can operate underwater, sea battles use a second set of zones that operate similarly to the zone used in *Ultimate Battle* and, more specifically, to the aerial combat altitude levels. Like them, these depth levels are abstract and do not represent specific physical distance, but rather a simple shorthand for describing the relative position of creatures in or under the water where a naval battle is occurring.

The Surface: Most naval battles take place at the surface level, for the simple reason that most creatures even in a magical campaign world that focuses on events on land cannot breathe or move easily in the water. Swimming creatures may dive underwater to escape detection or combat, but they must rise to the surface level to use their own natural or manufactured weapon attacks. An aquatic unit must move at the surface in order to attack or be attacked in melee.

The Shallows: Units in this depth zone are beyond the reach of melee attacks, except by other creatures

that are also swimming in the shallows. However, they can still see creatures and vessels on the surface and can be seen themselves, though with some difficulty. Creatures in the shallows can attack with or be attacked by ranged attacks, though such attacks are made at a substantial penalty.

The Deep: Units in this depth zone cannot effectively see units on the surface or be seen by them, and are too far away to effectively attack or be attacked by them.

The Seafloor: This is a special depth zone that applies whenever there is a submerged structure or terrain that is relevant to the course of a battle. The Seafloor can exist in the Shallows or the Deep, depending on the depth of the water. A battle on the Seafloor works similarly to a second Surface depth level, in that creatures on the Seafloor and creatures in the adjoining Shallows or Deep can engage in ranged combat but cannot engage in melee unless either the swimming creatures come down to the Seafloor or the creatures on the Seafloor leave it and swim up into the open water.

Changing Depth: While naval combat is assumed to be fluid and dynamic, with the ability to rapidly change location and direction, the abstract depth levels described above represent where a naval unit

is spending the majority of its time during a given Battle Phase. Most conventional naval units spend all of their time on the surface, but swimming creatures or special vehicles able to move underwater can change their depth level throughout the course of a battle. Each time a new Battle Phase begins, naval units capable of submerging can adjust their depth by one step, or by two steps with a successful Morale check.



WIND EFFECTS

While naval units are not quite as vulnerable to high winds as are aerial units, they are still subject to being buffeted by high winds and tossed about by surging seas kicked up by stormy weather. Naval units are generally assumed to be maneuvering constantly throughout a battle to maintain an advantageous position with respect to the wind and their opponents, but ongoing strong winds can have a deleterious effect on the combat effectiveness of naval units.

TABLE 7: WIND EFFECTS (NAVAL)

WIND STRENGTH	SPEED	DMG	PILOTING
<i>Light or Moderate</i>	-	-	-
<i>Strong</i>	1 hex	1	-1
<i>Severe</i>	2 hexes	1d3	-2
<i>Windstorm</i>	4 hexes	1d6	-4
<i>Hurricane</i>	6 hexes	2d6	-8
<i>Tornado</i>	12 hexes	4d6	-16

Wind Speed: This refers to [Table 13-10: Wind Effects](#) in the *Pathfinder Roleplaying Game Core Rulebook*. To have this effect, the relevant wind speed must be present throughout the entire battle phase (lasting 1d6 hours).

Speed: Naval units moving in the same direction as the wind add this amount to their daily speed; those moving against it subtract this amount from their daily speed. If this reduces their speed to zero, the unit is unable to make progress against the wind by sailing, though units with a row speed (including vehicles powered by alchemical engines rather than creatures pulling the oars) can move at their row speed.

River Travel: Ships moving downriver move an additional 2 hexes per day.

Tacking: A naval unit can move against the wind with a successful Morale check, adjusted by its Maneuverability. If the check succeeds, the unit treats the wind strength as one category less severe for the purpose of its speed, plus one additional category less severe for every 5 points by which the check exceeds the DC. Tacking is very tiring, however, and the unit automatically becomes fatigued after spending a day tacking.

Piloting: Naval units take a penalty on Seaworthiness and Maneuverability in stormy seas. This affects Morale checks made to maneuver and may preclude the use of certain nautical tactics that require a minimum maneuverability rating.

Damage: Operating in stormy weather places strain on naval units. At the end of each Battle Phase (or each day of overland travel), a naval unit must succeed on a Morale check or take the listed damage. An aerial unit that takes damage from high winds must make a second Morale check or become fatigued (or exhausted, if already fatigued). Ship crews add their Seaworthiness modifier to this check.

NAVAL UNITS

Naval units are a bit different from aircraft when it comes to both kingdom-building and mass combat by the simple fact that ships are such a familiar and customary part of the commerce and activity of any nation and its waterways. They can be a focus element, or they can recede into the background, similarly to the implied police forces and general militia of a nation represented by its Stability checks. If not wholly in the background, ships can be engaged on a fairly basic level in a way that keeps the focus on land battles. While armies can traverse land easily enough, for crossing water or traveling upriver or down they require ships to transport them. The basic ship types described in the *Pathfinder Roleplaying Game Core Rulebook* provide a simple basis for involving waterborne transport and combat in conjunction with the mass combat rules. *Ultimate War* therefore presents two sets of rules for ships, because for some these relatively simple rules provide all the integration they need or want for incorporating ships with a primarily land-based mass combat simulation.

Chariots and Howdahs: Any suitable aquatic creature can bear passengers into combat by mounting a howdah on its back or having a floating chariot pulled behind it. These howdahs and chariots do not use the ship rules that follow but instead follow the same rules as their land-bound equivalents, as described in *Ultimate Battle*. Such conveyances are dangerous, however, unless the aquatic creatures are well-trained, as swimming units bearing such passengers will typically dive underwater if they are routed. A unit of riders unable to breathe water is treated as the crew of a ship that has sunk.

Maneuverability: Like aircraft, ships have a defined maneuverability modifier based on their type. When aquatic units comprised of swimming creatures must make a Morale check adjusted by their size:

TABLE 8: MANEUVERABILITY MODIFIERS (AQUATIC)

MODIFIER	SIZE
+4	<i>Small or smaller</i>
+2	<i>Medium</i>
+1	<i>Large</i>
0	<i>Huge</i>
-1	<i>Gargantuan</i>
-2	<i>Colossal</i>

Constructing Ships: Building keelboats, longboats, and longships can be done in any city with Piers. Building galleys, sailing ships, and warships, however, necessitates a Waterfront. Building a ship takes 1 month per 5 BP (or fraction thereof) of its cost if built using Piers; 1 month per 10 BP (or fraction thereof) if built in a Waterfront. When a ship is completed, its crew is automatically recruited without the need for a separate recruitment Edict^{UR}; this applies only to the ship's actual crew, not to artillerist units or other passengers.

TABLE 9: SHIP CONSTRUCTION REQUIREMENTS

SHIP	BUILDINGS REQUIRED
Barge	Piers
Canoe	-
Canoe, War	-
Cutter	Piers
Dreadnought	Alchemist, Foundry, Magical Academy, War College, Waterfront
Galleass	Alchemist, Exotic Artisan, Waterfront
Galley, Great	Exotic Artisan, Waterfront
Galley, Lesser	Piers
Greatship	Exotic Artisan, Waterfront
Ironclad	Alchemist, Foundry, War College, Waterfront
Junk	Exotic Artisan, Piers
Keelboat	Piers
Longboat	-
Longship	-
Nautilus	Alchemist, Foundry, Magical Academy, War College, Waterfront
Raft	-
Roundship	-
Rowboat	-
Sailing Ship, Large	Waterfront
Sailing Ship, Medium	Waterfront
Sailing Ship, Small	Piers
Skiff	-
Submersible, Small	Foundry, Magical Academy, Piers
Warship	War College, Waterfront

SHIP DESCRIPTIONS

History offers a wealth of different ships powered by oar and sail, and in a fantasy game alchemical steam or more exotic means of propulsion are certainly viable options for military watercraft.

Barge: A simple flat-bottomed cargo vessel with open decks and sometimes a small pilot house, sometimes towed by other vehicles or by land-bound draft teams and other times equipped with sails, poles, or oars. Barges are sometimes outfitted as floating pleasure palaces for the wealthy or as deadly firing platforms.

Canoe: A small personal watercraft, maneuverable and favored on lakes and rivers. Canoes are easily portable and typically made of simple materials, such as stretched hides (coracle) or hollowed-out logs (dugout).

Canoe, War: A deep-hulled canoe, often with outriggers for stability, and often with a stepped (removable) mast for sailing, war canoes can move with considerable speed crewed by a team of rowers who usually double as warriors.

Cutter: A narrow-hulled sailing vessel, usually with either a large lateen foresail and a small square sail aft, or a single mast with foresails rigged to a bowsprit. Also called a ketch,

pinnace, or sloop, these ships can manage deepwater voyages but are also swift and maneuverable and able to pull in close to shore. Often used as patrol craft to hunt pirates, slavers, and smugglers.

Diving Bell: This reinforced metallic capsule has no propulsion system but is lowered from a larger ship to allow explorers or troops to descend underwater and then raise them up again when their job is done. A diving bell usually has a renewing supply of pumped air as long as it remains tethered to its mother ship.

Dreadnought: A massive alchemically powered ironclad, usually driven by paddlewheels amidships or astern, guided by a small crew but often bristling with armament that dwarfs that of smaller vessels.

Galleass: A large, high-sided galley with additional sail and a separate gunnery deck over the heads of the rowers and often mounted with castles fore and aft. Sometimes a bit slower than traditional galleys, their additional firepower more than made up for their lack of speed.

Galley, Great: These massive oared vessels are driven by over a hundred rowers driving multiple banks of oars, though their sails also allow them to take advantage of the wind. Their swift ramming strikes demolish smaller ships in their path while their full decks enable them to carry cargo, passengers, or siege engines.

Galley, Lesser: A smaller version of the galley with a smaller complement of rowers arrayed in usually only one to three banks of oars in an open hull with partial decking for catwalks and storage. Swift and nimble, lesser galleys make swift hit and run strikes but rarely venture far from land.

Greatship: A large sailing vessel adapted for war, also called a carrack, nao (nau), man o'war, or ship of the line, a greatship has high castles fore and aft and fighting tops dot its rigging to allow it to rain death upon the decks of other ships. Greatships are top and front-heavy, and less seaworthy than their merchant cousins.

Ironclad: Slow but indomitable, ironclads are terrifying in battle as long as allied vessels can slow down the enemy enough to prevent their escape.

Junk: This flat-bottomed sailing ship has no keel but a partitioned hold with watertight compartments and a broad, flat deck. Its hull and ribbed sails make it seaworthy even in severe tropical storms.

Keelboat: These large flat-bottomed boats are popular river craft and lake vessels. While they do not tolerate adverse weather well, their sails expedite passage upriver or against currents, while their oars and poles keep them safe from sand bars and similar hazards.

Longboat: These sturdy oared craft, also called launches or whaleboats, can withstand heavy surf and are often carried by larger vessels to transport passengers or cargo to shore and back.

Longship: With enough seaworthiness to venture into deep ocean waters but a shallow enough draft to ride up onto shore, and able to switch easily between oar and sail, a longship or drakkar has impressive versatility.

Nautilus: This sleek ironclad cuts through the water like a blade whether at the surface or below the waves, powered by an alchemical engine and a magically replenishing air supply and airlocks.

Raft: Little more than sawn logs or planks lashed together or onto a collection of barrels, rafts are easily built but fragile in rough seas. In calm backwaters, they are used for travel and habitation.

Roundship: These single-masted, round-hulled vessels float lightly in the water and are easy to drive up onto a beach without harm, making these knarrs (or knorrs) popular with seaborne raiders.

Rowboat: Typically confined to shallow or calm waters, these small vessels (also called pirogues or dinghies) are nimble but vulnerable to high seas and are driven by a pair of oars.

Sailing Ship, Large: These lumbering galleons, outfitted with three to four decks and masts, are sturdy and spacious enough for long oceanic voyages.

Sailing Ship, Medium: The workhorse of the sea lanes and tradewinds, these two-masted ships like the caravel have a square-rigged mainmast for speed and a lateen mizzenmast for maneuverability.

Sailing Ship, Small: A single-masted ship, whether square or lateen-rigged, with a rounded, sturdy hull. Not particularly fast or maneuverable, their hull planks are often nailed in overlapping rows (clinker built) or sewn together. Some have full decks (dhow), while others are built with only partial decks (cog, nef).

Skiff: This long, flat-bottomed boat has a very shallow draft and no keel or rudder. Also called a gondola, wherry, or punt, a skiff is steered and propelled by one crewman standing with a large oar or pole. Often used for fishing, skiffs also carry cargo in shallow, calm waters like canals, lakes, and marshes.

Submersible: A small personal underwater craft such as an *apparatus of the crab*, able to move by magic and keep its crew submerged for short periods of time.

Warship: This military vessel of advanced design is equally swift whether driven by sail or sweeps. Warships or dromonds are highly maneuverable and full decks shield their rowers from enemy missiles.

SIMPLE SHIP RULES

If ships are not going to play a major role in your kingdom-building or mass combat campaign, you may want to limit the

options for ships to the following six ship types described in the *Pathfinder Roleplaying Game Core Rulebook*.

Cost: The cost in Building Points (BP) to construct a ship of this type. Costs listed here represent average values and do not necessarily match specific ship costs on [Table 10: Simple Ship Table](#) or [Table 11: Ship Statistics, General](#).

Consumption: Ships add 1/10 their Cost (rounding down) to the kingdom's monthly Consumption, although ships with a Cost under 5 BP have no Consumption cost. This does not include Consumption paid for their crews.

Spaces: This refers to the number of spaces of siege weapons that can be carried by a ship. A battery of Large siege weapons takes up 1 space, Huge weapons 2 spaces, and Gargantuan weapons 4 spaces. Because these weapons must be split on both sides of a ship, no more than one-half of a ship's siege batteries (minimum 1) can be used to target the same enemy unit or building.

FP: The number of Fortification Points (FP) that must be depleted before the vessel's BP value can be directly attacked.

Crew: The number of sailors needed to crew the ship. A typical ship's crew is comprised of 3rd-level experts (for military vessels), though crews of NPC fishing or cargo vessels might be lower-level experts or commoners. Crews in the employ of the PCs' kingdom count as auxiliary armies, similar to units of artillerists, and count against the kingdom's **Manpower^{UR}** but not against its total number of armies. Up to half the ship's crew can serve as an artillerist unit to man any siege weapons on board; other artillerists must be carried as passengers.

Oars: The number of rowers required to row the ship, in addition to those listed in the **Crew** column. Rowers can be conscripted from slaves or prisoners of war (see **Victory and Aftermath^{UB}**), and such rowers do not count against the kingdom's Manpower; however, a ship using such rowers takes a -2 penalty on Morale checks.

Pass: The number of passengers the ship can carry. This number is halved if the passengers are Large and halved again for each size above Large (up to a maximum of one size larger than the ship's size). For mounted units with Large or larger mounts, each mount and its rider counts as one creature of the mount's size. The number of passengers the ship can carry. This number is halved if the passengers are Large; for mounted units with Large mounts, each mount and its rider counts as one Large creature.

TABLE 10: SIMPLE SHIP TABLE

SHIP TYPE	COST	SPACES	FP	CREW	PASS	CARGO	ROW	SAIL	SAFE WATERS
<i>Galley^R</i>	20 BP	4	10	100	200	150	8 hexes	4 hexes	Coastal
<i>Keelboat</i>	3 BP	-	2	10	50	20	1 hex	2 hexes	Rivers, Coastal
<i>Longboat</i>	1 BP	-	-	-	10	2	1 hex	-	Rivers, Coastal
<i>Longship</i>	10 BP	-	4	50	100	50	3 hexes	6 hexes	Coastal, Deep Water
<i>Sailing Ship</i>	10 BP	4	6	20	200	200	-	4 hexes	Coastal, Deep Water
<i>Warship^R</i>	15 BP	4	8	50	100	100	5 hexes	5 hexes	Coastal, Deep Water

^R These ships mount a ram to use in making ramming attacks.

Cargo: The number of tons of cargo that can be carried by the ship. If you are using ships to establish a trade route with a *Trade Edict* (as described in the Optional Kingdom Rules section of Chapter 4 of *Pathfinder Roleplaying Game Ultimate Campaign*), each BP of food or raw materials weighs 20 tons, each BP of goods weighs 10 tons, and each BP of luxuries weighs 1 ton.

Row/Sail: The daily speed of the ship using each mode of propulsion.

Safe Waters: The listed terrain types are generally safe for travel in a ship of this type in terms of seaworthiness. If a ship tries to sail in water terrain outside its safe waters, the kingdom owning it must attempt a Stability check. If the check fails, the ship is lost at sea.

Except as noted above, all notes pertaining to **Table 10: Simple Ship Table** also apply to Tables 11 and 12. The ships in Table 10 represent an averaged value among many ship types reflected in Tables 11 and 12 and do not necessarily precisely replicate the statistics of ships described on Tables 11 and 12.

Size: This represents the ship's size relative to other ships. These size categories are not equivalent to the size categories of creatures, as many ships are larger than several colossal creatures put together. A ship armed with siege weapons also

DV: The Defense Value (DV) for attacks made against the ship itself.

Anchored Units: The DV of a ship at anchor is reduced by 2.

Docked Units: The DV of a ship that is beached or docked is reduced by 4.

Cover: If an attacking unit chooses to attack a unit carried on the target ship rather than the ship itself, the unit adds the listed modifier to its own DV against ranged attacks and against melee attacks when the units are not engaged. If already engaged with another naval unit, this bonus no longer applies.

Spaces: This refers to the number of spaces of siege weapons that can be carried by a ship. A battery of Large siege weapons takes up 1 space, Huge weapons 2 spaces, and Gargantuan weapons 4 spaces. Because these weapons must be split on both sides of a ship, no more than one-half of a ship's siege batteries (minimum 1) can be used to a target the same enemy unit or building.

Dmg: When this amount of damage has been dealt to the ship, its mobility and structural integrity are impaired. Its speed is reduced by 1 and it takes a -2 penalty its Seaworthiness and Maneuver modifiers.

TABLE 11: SHIP STATISTICS, GENERAL

SHIP TYPE	COST	SIZE	CREW	OARS	PASS	ROW	SAIL	SAFE WATERS
Barge	2 BP	Garg	5	50	100	1 hex	-	Rivers, Coastal
Canoe	1/50 BP	Small	1	*	1	3 hexes	-	Rivers, Coastal
Canoe, War	1 BP	Medium	1	10	5	4 hexes	2 hexes	Rivers, Coastal, Deep Water
Cutter	5 BP	Large	5	10	5	1 hex	6 hexes	Coastal, Deep Water
Diving Bell	2 BP	Medium	10	-	5	-	-	any, Underwater
Dreadnought	100 BP	Colossal	1	-	40	7 hexes	-	Coastal, Deep Water
Galleass	38 BP	Colossal	50	150	100	8 hexes	6 hexes	Coastal
Galley, Great	30 BP	Colossal	20	200	200	8 hexes	8 hexes	Coastal
Galley, Lesser	10 BP	Huge	5	50	20	6 hexes	3 hexes	Coastal
Greatship	40 BP	Colossal	20	-	500	-	4 hexes	Coastal, Deep Water
Ironclad	50 BP	Garg	10	50	20	2 hexes	2 hexes	Coastal
Junk	15 BP	Huge	5	-	5	-	4 hexes	Coastal, Deep Water
Keelboat	3 BP	Large	1	10	50	1 hex	2 hexes	Rivers, Coastal
Longboat	1/2 BP	Medium	1	10	-	1 hex	-	Rivers, Coastal
Longship	12 BP	Huge	50	100	-	6 hexes	4 hexes	Coastal, Deep Water
Nautilus	75 BP	Large	10	-	20	8 hexes	-	Coastal, Deep Water, Underwater
Raft	1/10 BP	Medium	5	*	5	1 hex	-	Coastal, Rivers
Roundship	6 BP	Large	5	10	10	4 hexes	4 hexes	Coastal, Deep Water
Rowboat	1/20 BP	Small	1	*	1	3 hexes	-	Coastal, Rivers
Sailing Ship, L	20 BP	Colossal	20	-	500	-	4 hexes	Coastal, Deep Water
Sailing Ship, M	10 BP	Huge	10	-	50	-	4 hexes	Coastal, Deep Water
Sailing Ship, S	6 BP	Large	5	-	20	-	4 hexes	Coastal
Skiff	1/10 BP	Medium	1	*	5	2 hexes	-	Coastal, Rivers
Submersible	25 BP	Small	1	-	1	2 hexes	-	any, Underwater
Warship	25 BP	Garg	10	50	200	5 hexes	5 hexes	Coastal, Deep Water

* All crew members of these small vessels man the oars.

Wreck: When this amount of damage has been dealt to the ship, it is crippled and barely able to function. Its speed is reduced to 1 hex and its penalty on Seaworthiness and Maneuverability increases to -4, and at the end of each Battle Phase (or each day of overland travel) its crew must succeed on a Morale check or the ship begins to sink (see below). If the ship is in a hex adjacent to land, it can limp to shore and dock or beach itself before it sinks, assuming its landing is not opposed. If forced into an opposed landing or if it is more than one hex from land its crew can attempt a second Morale check to get the ship to shore; if the check is failed the ship sinks. If the ship rolls a natural 1 on a Seaworthiness check while Wrecked, it immediately sinks.

Sailing a wrecked ship is a great strain on the crew, and at the end of each Battle Phase (or day of overland travel) the crew must succeed on a Morale check or take 1 point of damage and become fatigued.

Sunk: When this amount of damage has been dealt to the ship, it is destroyed and its crew, passengers, and cargo are deposited in the water. Any units on board the ship when it sinks, including its crew, artillerists, or other passengers, takes 1d6 points of damage and must make a Morale check; if failed, the unit takes double damage and becomes fatigued. During the Melee Phase, allied naval units can attempt a rescue (or

TABLE 12: SHIP STATISTICS, COMBAT

SHIP TYPE	DV	COVER	SPACES	DMG	WRECK	SUNK	SEAWORTHINESS	MANEUVER
Barge	13	-	6	10	20	30	+0	-10
Canoe	8	-	-	0	0	1	-2	+4
Canoe, War	11	-	-	4	8	12	+0	+2
Cutter	14	+1	1	6	12	18	+2	+2
Diving Bell	12	+1	-	3	6	9	-2	-10
Dreadnought ^R	30	+6	12	35	70	105	+2	+2
Galleass ^R	22	+3	6	28	56	84	+0	-2
Galley, Great ^R	18	+1	4	20	40	60	+0	-2
Galley, Lesser ^R	12	-	1	10	20	30	-2	+0
Greatship	22	+3	8	28	56	84	+4	-6
Ironclad ^R	25	+4	6	25	50	75	-2	-4
Junk	13	+2	4	15	30	45	+6	+0
Keelboat	11	+1	1	10	20	30	-2	-2
Longboat	10	-	-	0	1	2	+0	+2
Longship	14	-	-	10	20	30	+4	+0
Nautilus ^R	25	+4	1	20	40	60	+4	+2
Raft	5	-	-	0	1	2	-4	-4
Roundship	12	-	-	6	12	18	+2	+2
Rowboat	6	-	-	0	0	1	-4	+4
Sailing Ship, Large	17	+2	4	25	50	75	+6	-4
Sailing Ship, Medium	15	+1	2	15	30	45	+4	-2
Sailing Ship, Small	13	-	1	8	16	24	+2	-2
Skiff	10	-	-	0	0	1	-4	+2
Submersible ^R	20	+3	-	4	8	12	+2	+4
Warship ^R	20	+2	4	21	42	63	+0	+2

^R These ships mount a ram to use in making ramming attacks.

allied aerial units an airlift) during the Melee Phase, and if in Coastal or River terrain surviving units from the sunken ship can forgo making a melee attack and instead attempt a Morale check to make their way to shore. A successful check brings them to the shore, but if there are enemy units not engaged that have not yet attacked in the Melee phase, they can oppose the unit's landing (see Docking under **Naval Tactics**).

If there is an allied ship anchored on the battlefield, a successful Morale check allows a unit to swim to that ship instead of to shore. If the ship does not have sufficient passenger capacity to carry a unit swimming to it in this fashion, all units aboard the ship are treated as fatigued until the excess passengers are removed.

Blood in the Water: Units floating in the water on the wreckage of a ship are vulnerable to attack and have a difficult time fighting back, taking a -4 penalty on DV, AV, RV, and OM.

Shipwrecked: Units that are not rescued or able to reach the shore by the end of the current Battle Phase (or within 8 hours, if in overland travel), this Morale check must be repeated; failure deals 1d6 points of damage and results in exhaustion. This Morale check must be repeated at the end of every Battle Phase or every 8 hours. A unit already exhausted is destroyed on a failed Morale check, regardless of its hit points.

Seaworthiness: This modifier applies on Morale checks made to stay safely afloat or otherwise avoid damage or destruction of the ship or its key components.

Maneuver: This modifier applies on Morale checks made to make tactical maneuvers during battle, including engaging or disengaging from opposing units.

NAVAL COMBAT

While armies can traverse land easily enough, for crossing water or traveling upriver or down they require ships to transport them. The basic ship types described in the *Pathfinder Roleplaying Game Core Rulebook* provide a simple basis for involving waterborne transport and combat in conjunction with the mass combat rules. *Ultimate War* presents two sets of rules for ships, because for some these relatively simple rules provide all the integration they need or want for incorporating ships with a primarily land-based combat simulation

Commanders and Ships: For commanders assigned to the crew of a ship or to leading a unit that is fighting on board a ship, use the following Leadership Bonus (LB) in lieu of the commander's normal LB. The effects of Leadership Bonus are described on page 12 of *Ultimate Battle* from Legendary Games.

LB (Naval): Determine LB (naval) as described above, substituting Profession (sailor) for Profession (soldier).

Ships as Support Vehicles for Land Battles: Sometimes a full-scale naval combat system is not really what is needed in a particular battle scenario. Ships may exist as part of the battle scenario or objective, but they may not have the cause to engage in a ship-to-ship combat or fleet actions. Instead, they may function as transportation for armies, using their passenger capacity to move troops more quickly along waterways than the troops themselves could move on land.

Alternatively, ships can serve as mobile artillery batteries, training their siege engines where desired. These ships can serve as more than transportation



using the same abstract battlefield zones discussed in *Ultimate Battle*. In general terms, ships always remain in the Ranged Zone with respect to armies on land, as the open water constitutes an impassable barrier to land-bound armies (see *Terrain^{UB}*). Ships carrying soldiers armed with ranged weapons can make ranged attacks every Battle phase, though they cannot engage in melee unless they dock or beach themselves and debark their passengers. Ships armed with siege weapons can use those weapons as easily as a land-bound artillery battery.

Ships and Close Assault Siege Weapons: Ships can mount rams (as noted in Table 12: Ship Statistics, Combat), which they can use to make ramming attacks against other ships. A ram takes up no spaces.

A ship can also mount an assault bridge. This functions as described under Siege Weapons, but it also grants a +1 MV bonus when making melee attacks against units on board other ships, and a +1 bonus on opposed Morale checks made to prevent an enemy ship or enemy unit on board a ship from disengaging, retreating, or withdrawing.

Shipboard Units: When facing other ships or aquatic armies, armies on board a ship can move into the Melee zone with units on other ships or with units on the surface of the water. Units on board ships follow the same rules for engagement as armies do on land, though shipboard armies gain a +2 bonus to Morale checks made to disengage when they use the Retreat or Withdraw tactic (see Tactics^{UB}). The ship itself does not fight in melee, of course; it is simply a platform upon which the unit it carries can fight, though the ship's crew can make ramming attacks using the ship itself as a weapon.

Shipboard units can also use ranged attacks, and in many naval battles ranged attacks are used almost exclusively until one ship has been pounded into submission or sinking, after which the victor closes in for a boarding action. Ranged attacks can be directed at the ship itself or at units on board the ship, but there is always some collateral damage in either direction. That is, a successful ranged attack against a shipboard unit also deals $1d3-1$ (minimum 0) points of damage to the ship itself. Likewise, a successful attack against the ship deals $1d3-1$ points of damage to one of the units on board. Generally speaking, the defender chooses which unit takes this damage; however, on a natural 20 the attacker chooses which unit takes this damage.

Underwater Units: Aquatic units on the surface can make melee and ranged attacks against other units (including ships) on the surface and vice versa. In addition, the crew of a ship can make a ramming attack during the Melee Phase against an aquatic unit comprised of Large or larger creatures. Smaller creatures cannot be effectively rammed.

Creatures able to move underwater can attack ships in the Melee Phase as long as they are in the shallows, though they cannot be attacked in return during that

phase. Ranged attacks made between aquatic units in the Shallows and units (including ships) on the surface take a -4 RV penalty due to the cover and concealment afforded by the water's surface.

Minelaying: A ship equipped with mines can use them during the Ranged Phase as indirect-fire ranged weapons (+0 RV modifier) against creatures in the Shallows, or even against creatures in the Deeps (-10 RV modifier). Alternatively, in the Melee Phase it can forgo an attack to use its mines to lay a minefield. Underwater creatures gain a +5 bonus on Scouting checks (see Camouflage and Scouting^{UB}) to notice an underwater minefield.

NAVAL TACTICS

Whether they are units comprised of swimming creatures or the crew and marines aboard ships, naval units follow most of the same rules as their land-bound equivalents, including all of the strategic options available to land-bound units as well as tactics like Cautious Combat, False Retreat, Full Defense, Sniper Support, Spellbreaker, Taunt, and Withdraw from *Pathfinder Roleplaying Game Ultimate Campaign* and Covering Fire, Overwhelming Onslaught, Pincer Maneuver, Pursuit, Retreat, Screening Defense, Siegebreaker, Skirmishers, Strafing Skirmishers, and Volley from *Ultimate Battle*. In addition to these standard tactics, naval units have a number of additional tactical options available to them.

Anchoring: The ship drops its anchor to halt its motion. An anchored ship gains a +2 bonus on Seaworthiness checks to survive stormy conditions. If an allied ship is anchored on the battlefield, units from sunken ships can swim to safety on the ship with a successful Morale check. If the ship does not have sufficient passenger capacity to carry a unit swimming to it in this fashion, all units aboard the ship are treated as fatigued until the excess passengers are removed. A ship can carry a maximum number of people equal to twice its total complement (crew + oars + passengers). A ship carrying more than this amount must make a Morale check (modified by its Seaworthiness) each round or become a Wreck. **Requirement:** The ship must be in Coastal or River terrain.

Beaching: The ship intentionally runs itself aground in order to rapidly disgorge its crew. Like docking, beaching takes place during the Melee Phase. Unlike docking, beaching does not require careful maneuvering and units aboard the ship take no penalty on their RV during the Ranged Phase. A beached ship still must make Morale checks (adjusted by its Seaworthiness) to avoid being damaged or wrecked in stormy conditions, but cannot be sunk.

The crew of a ship that beaches itself must succeed on a Morale check with a bonus equal to the ship's maneuverability modifier; if failed, the ship takes $1d6$ points of damage from the beaching maneuver and becomes damaged. It cannot be removed from the beach until the battle is over, and even if returned to the water its speed is reduced by 1 until all damage is repaired. If the ship is damaged in this fashion,

all units aboard it take a -4 RV penalty for the remainder of the battle. If the ship is damaged in this way, any passengers aboard (including artillerist units and other units) must also succeed at Morale checks or take 1 point of damage and become fatigued.

Landing Troops: Once the ship has been beached, any units aboard can clamber off its sides and attack immediately in the Melee Phase. Units leaving the ship take a -1 penalty on Speed and MV for the remainder of the current Battle Phase.

Launching Back to Sea: A beached ship that is Medium or smaller can be move back out into the water during the Rout Phase if its crew wishes to retreat rather than staying on the shore. A Large ship can be moved back into the water during the Melee Phase or Rout Phase of the following Battle Phase if the crew succeeds on a Morale check, modified by the vessel's Seaworthiness and its Maneuverability. Larger ships require one successful Morale check for each size category they are above Medium, made by their own crew or by other units (naval or aquatic units or land-based units) made during the Melee Phase or Rout Phase of subsequent Battle Phases.

Boarding Action: This functions as described for Aerial Tactics.

Cut the Rigging: This functions as described for Aerial Tactics.

Docking: The ship makes its way into a harbor with Piers or a Waterfront and unloads its units at a pier to carefully unload its passengers. Docking takes place during the Melee Phase. Because of the need for careful maneuvering when docking, any units on board the ship take a -2 penalty on their RV during the Ranged Phase. A docked ship still must make Morale checks (adjusted by its Seaworthiness) with a +4 bonus to avoid being damaged, wrecked, or sunk in stormy conditions.

If units aboard the ship attempt to disembark, any enemy army that is not engaged and that is eligible to attack in the Melee Phase can oppose their landing. The unit attempting to leave the ship must resolve this as a boarding action (as described in Aerial Tactics). If their boarding action onto the docks is repulsed, they are forced back onto the ship. If the unit attempting to disembark has already attacked in the Ranged Phase, it takes a -4 penalty on its OM and opposed Morale check when making a forced landing. Any unit that successful disembarks takes -1 penalty to its Speed during the Battle Phase in which is disembarks. Members of the ship's crew cannot disembark in the same round that they use this tactic. Requirements: ground unit on board a ship.

Flak: This functions as described for Fighting Units on the Ground.

Picket Duty: Your unit is always scanning the horizon, looking for vessels small and large as well as creatures moving under the water. You gain a +2 bonus on Scouting checks to spot enemy naval or aquatic units and a +2 DV bonus against attacks by naval or aquatic units. You

cannot make attacks against armies on the ground or in the air when using this tactic. Requirements: none.

Ramming: Your ship intentionally crashes into another vessel during the Melee Phase. An aquatic unit of Huge or larger swimming creatures can also use this tactic. Your unit and the target unit make opposed Morale checks plus each unit's speed (in hexes) and Maneuverability modifier. If your opposed check fails, your opponent evades you and your attack deals no damage. If you succeed in this opposed check, you deal damage based on the size of your ship:

TABLE 13: RAMMING

SHIP OR CREATURE SIZE	MV	DAMAGE
Medium or smaller	+2	1
Large	+4	1d4
Huge	+6	1d6
Gargantuan	+8	1d8
Colossal	+10	1d10

Ramming an opponent also deals half as much damage to the attacking ship or unit as the target ship or unit would have dealt had it made a successful ramming attack. In addition, any units (including both crew and passengers) on the target ship must succeed at a Morale check or take 1 point of damage and become fatigued until the end of the current Battle Phase.

Mounted Rams: Some ships, those marked on Tables 10-12 with a superscript ^R, have prows reinforced to provide maximum impact. Such ships deal double the normal damage on a successful ram attack, while they themselves take no damage when making ram attacks. In addition, after a successful ramming attack against a ship, the attacking unit and the crew of the target ship must succeed on opposed Morale checks, modified by the ship's Seaworthiness modifier. If the attacker wins the check, the target ship becomes Damaged, regardless of how many hit points it has. If the ship is already Damaged, it is Wrecked, while a Wrecked ship is Sunk. If the defending ship is larger than the ramming ship, the defending crew gains a +2 bonus per size category of difference between the two.

Rapid Repair: During the Melee Phase, your ship can rapidly improvise repairs that help it get back underway. Make a Morale check with a bonus equal to the Seaworthiness of your ship and divide the result by 5; the result is the number of points of damage to your ship that you repair. If your ship has the damaged condition by an effect other than accrued damage, you remove that condition if you beat the DC of your Morale check by 5 or more. If your ship is wrecked by an effect other than accrued damage, you reduce that condition to damaged if you beat the DC of your Morale check by 10 or more. You cannot repair a ship that has sunk. Requirements: none.

Rescue: During the Melee Phase, your ship can pick up a unit in the water, which may be a unit from a sunken ship or an aquatic unit that wishes to board the ship. Picking up one unit is automatic. You can pick up multiple units as long as you make a successful Morale check for each unit after the first, with a cumulative -2 penalty for each unit after the first. Once you fail a Morale check, you cannot rescue additional units.

If the number of passengers your ship carries exceeds its passenger limit on [Table 11: Ship Statistics, General](#), all units on the ship (including the crew) are considered fatigued until the excess passengers are removed from the ship. If the number of passengers is more than double the passenger limit, all units aboard are treated as exhausted and the ship's crew must succeed on a Morale check (modified by its Seaworthiness) at the end of each Battle Phase (or each day of overland travel) or become damaged (or wrecked if already damaged). *Requirements:* none.

Run for the Shallows: During the Ranged Phase, your ship can forgo making a ranged attack in order to move into shallow waters where larger ships cannot follow without running aground. Make a Morale check with a bonus equal to your ship's Maneuverability. Any ship of your size or larger wishing to attack you in Melee must succeed on a Morale (modified by its Maneuverability) with a penalty of -2 for each size it is larger than yours. If the check fails, the enemy ship fails to close to melee range with you and takes 1 point of damage for each size category it is larger than yours as its hull hits the rocks, reefs, or seafloor beneath. Any ship that takes damage in this fashion must succeed on a second Morale check modified by its Seaworthiness or become damaged (or wrecked if already damaged). If it fails this check by 5 or more, it is also considered beached.

Because of their construction, a barge, junk, longship, roundship, or skiff is treated as one size smaller than its actual size for the purpose of this tactic.

If you use this tactic in stormy conditions (Strong or higher wind levels), the crew must attempt a Morale check at the end of the Battle Phase or be driven aground by the wind, beaching the ship. *Requirement:* Ship in Coastal or River terrain. This tactic can sometimes be used in Deep Water if there are shoals, reefs, or rocky islets present.

Shear the Oars: Your ship intentionally sideswipes an oared vessel during the Melee Phase in an attempt to snap off its oars on one side. An aquatic unit of Large or larger swimming creatures can also use this tactic. Your unit and the target unit make opposed Morale checks plus each unit's speed (in hexes) and Maneuverability modifier. If your opposed check fails, your opponent evades you and your attack deals no damage. If you succeed in this opposed check, you deal no damage but the target ship's rowed speed is reduced by half (rounding down, minimum of 0) and its Maneuverability is reduced by 2 until the ship is repaired. *Requirement:* Maneuverability modifier of -2 or better.

Sweeping Salvo: Your unit knows how to sail in close to shore in order to launch ranged attacks against enemies on the beaches, or to swiftly glide through enemy fleets and formations while raining death upon other vessels. Your unit can attack two enemy units in a single Battle phase during the Ranged Phase. Your unit gains -2 RV and -2 DV for the remainder of the Battle phase and your attacks deal only half damage. If an army you attack during a strafing run is engaged with a friendly army, you automatically deal 1 point of friendly fire damage to that allied army. You cannot attack in the Melee phase after making a strafing run. *Requirement:* flying unit at low altitude or ground level with ranged attack capability.

SIEGE WARFARE

Inevitably in warfare, one army will have to assault a fortified position held by the enemy, where a lightning-fast attack is not possible and the attacker must settle in to break the defender's city, or his will. A number of specialized tactics are available in siege situations, as described below. Sieges often make use of siege weapons, as described below, though there are a number of siege tactics described below that do not depend on the use of such weapons.

The standard rules presuppose a collection of siege weapons that travels with a regular army and which may be of several different types. The rules here provide for more detailed and varied options for siege engines, combining the rules from *Pathfinder Roleplaying Game Ultimate Combat* and *Pathfinder Roleplaying Game Ultimate Campaign*.

Sieges and Commanders and Sieges: For commanders assigned to a unit of artillery, use the following Leadership Bonus (LB) in lieu of the commander's normal LB. The effects of Leadership Bonus are described on page 12 of *Ultimate Battle* from Legendary Games.

LB (Siege): Determine LB (siege) as described above, substituting Knowledge (engineering) for Profession (soldier), and allowing a bonus for an Intelligence modifier of +3 or greater rather than Wisdom.

Standard Combat and Attack Rolls: These rules are designed as part of the mass combat rules and as such are not suitable for use with the standard combat rules in the Pathfinder Roleplaying Game.

ARTILLERISTS

Unlike the standard rules, wherein abstract siege weapons are embedded within ordinary armies, each siege weapon described below has a crew, typically comprised of artillerists (3rd-level experts). These artillerists must be recruited as ordinary soldiers and count against your kingdom's Manpower limit and have Consumption like any other active or reserve army. However, they are like reserve armies in that they do not count against the number of armies your kingdom can maintain.

Artillerists in Combat: Artillerist units are fairly vulnerable in combat situations; however, because they are fairly compact they are easy for other armies to defend. If an allied army uses the Screening Defense tactic, it can protect a number of artillerists equal to half its own size, even if the artillerists are from multiple units. If the defending army using this tactic takes damage from a ranged attack, choose one of the artillerist units it guards randomly to take the 1d6-3 points of collateral damage; conversely, a successful ranged attack (including a Bombardment attack against the siege weapons themselves rather than the artillerists) against any artillerist unit deals 1d6-3 points of damage to the army protecting it.

SIEGE WEAPONS

The following rules describe the use of siege weapons, including both ranged siege weapons like cannons and catapults as well as close assault weapons like battering rams and siege towers. This applies to siege weapons whether they are mobile weapons used on a battlefield, gunnery emplacements in a fortification, or vehicular weapons mounted on board an aircraft or naval vessel. All types of siege weapons use the same rules. A “siege weapon” is, generally speaking, an abstraction and does not typically represent a single siege weapon but rather a battery of such weapons that are crewed by a group of trained artillerists, though manual tasks such as loading weapons or wielding a battering ram may be undertaken by assistants retained for their strength rather than their special training.

Consumption: The ammunition, supplies, tools, and draft animals involved in moving and maintaining a battery of siege weapons increases Consumption by 1d2 for each battery of siege weapons each time they are involved in a battle. Cannons and bombards increase Consumption by 1d4 per battery per battle.

Fragility: Siege weapons are easily damaged by other siege weapons, taking double damage when the weapons themselves are targeted. Siege weapons are undamaged by ordinary ranged attacks, although the artillerists crewing them are affected by them normally.

Gunpowder Weapons: If your campaign uses gunpowder weapons, such as bombards, cannon, and rocket springals, every time one of your artillerist units fires such a weapon there is a 10% non-cumulative chance that the backblast and fumes from these weapons produce light smoke (see **Visibility^{UB}**) on the battlefield; if light smoke already exists, this increases to thick smoke. This smoke persists until the end of the next Battle phase.

Misfires: Bombards, cannons, firedrakes, firewyrms, and rocket springals are somewhat unreliable, and if an army using such siege weapons rolls a natural 1 on its army or unit attack roll the weapon misfires, with the resulting consequences determined by rolling 1d20. Damage from a misfire is treated as one-half fire damage for the purpose of resistance or immunity.

TABLE 14: GUNPOWDER SIEGE WEAPON MISFIRE RESULT

D20	RESULT	EFFECT
1-8	<i>Misfire</i>	<i>The weapon fails to fire and deals no damage.</i>
9-14	<i>Backfire</i>	<i>As misfire, but the artillerist unit manning the weapon takes 1d3 points of damage and the area around the weapon and its accompanying unit (including any weapon that is engaged with the unit or protecting it using a defensive tactic or boon) is filled with light smoke until the end of the Battle Phase.</i>
15-18	<i>Cracked</i>	<i>The weapon itself is damaged, taking 1d6 points of damage. It can still be fired, but it now misfires on a natural 1 or 2, with a +5 modifier to future rolls to determine misfire results.</i>
19-20	<i>Explodes</i>	<i>Weapon destroyed, and the accompanying artillerists are affected as a backfire, but take 2d4 points of damage. Other engaged armies or defending armies take 1d3 points of damage</i>

RANGED SIEGE WEAPONS

Many siege weapons are designed to attack enemy fortifications, armies, and ships at a great distance. Direct-fire siege weapons shoot on a relatively flat trajectory and are easier to aim at moving targets but have difficulty shooting over walls. Indirect-fire weapons fire their payloads on a high-arching trajectory that makes it difficult to target moving creatures (though they can drop scatter shot on concentrated masses of troops) but makes it easy for them to fire over high walls.



Ballista: Rather like an enormous crossbow, a ballista's power is provided by twisted skeins of animal sinew used as torsion springs which drive a pair of adjustable arms. A cord connected to both arms is winched back and a projectile loaded into a grooved board and propelled forward by a wide strap or cup of leather to release. Gate-breaker ballistae are massive engines commonplace in fortified defenses and often used by those attacking such places by land or and on large warships. Heavy ballistae, also called arcuballistae, are among the most common siege engines, favored for their maneuverability and ease of use and often mounted atop towers. Light ballistae, often called carrobballistae, are mobile heavy weapons that pack a good punch, often mounted on metal-plated war wagons. Ballistae are direct fire weapons.

Bombard: A bombard is a thick-walled cannon, usually short in length but wide in bore. Also called a mortar, a bombard is designed to launch its projectiles over walls and obstructions and cannot be used for direct fire attacks, though it can launch both solid shot and scatter shot.

Cannon: Cannons are siege weapons made of metal, some cast in one piece like long, narrow bells, while others are built like bundles of metallic staves welded together and reinforced with iron bands. Cannons use gunpowder (or its magical equivalent, depending on the technology level and magic level of the campaign world) to fire its projectiles with devastating force. A standard cannon, also called a falconet, saker, or culverin, can be mounted on the ground or in a wooden frame for use in ships and fortifications. Those traveling with armies are typically bolted to heavy wheeled frames and towed by draft animals. Fiend's mouth cannon, also called culverin extraordinary, siege cannon, or true cannon, are too large to mount in any but the largest of ships, and usually are stationed in hardened artillery emplacements.

Catapult: Historically speaking, the dividing line between ballista and catapult is far from clear, but for the purpose of these rules a catapult is a stone-throwing weapon powered by winched arms run through torsion skeins, either single-armed like the onager or double-armed tension-torsion hybrids like the mangonel, holding

TABLE 15: RANGED SIEGE WEAPONS

DIRECT-FIRE WEAPONS	COST	SIZE	SETUP	CREW	OM	SIEGE DAMAGE
<i>Ballista, light</i>	1 BP	Large	Mobile	10	+2	1d3
<i>Ballista, heavy</i>	2 BP	Huge	1	20	+4	1d4
<i>Ballista, gate breaker^L</i>	3 BP	Garg.	1	20	+6	1d6
<i>Cannon</i>	12 BP	Large	Mobile	10	+6	2d4
<i>Cannon, fiend's mouth^L</i>	18 BP	Huge	1	20	+8	2d6
<i>Firedrake</i>	8 BP	Huge	Mobile	20	+8	1d4 ^F
<i>Firewurm</i>	12 BP	Garg.	1	20	+12	1d6 ^F

INDIRECT-FIRE WEAPONS	COST	SIZE	SETUP	CREW	OM	SIEGE DAMAGE
<i>Bombard, light</i>	12 BP	Large	Mobile	10	+0	2d4
<i>Bombard, standard^L</i>	18 BP	Huge	1	20	+0	2d6
<i>Bombard, heavy^L</i>	24 BP	Garg.	1	20	+0	2d8
<i>Catapult, light^L</i>	1 BP	Large	Mobile	10	+0	1d4
<i>Catapult, standard^L</i>	2 BP	Huge	1	20	+0	1d6
<i>Catapult, heavy^L</i>	3 BP	Garg.	1	20	+0	1d8
<i>Fireworks</i>	1 BP	Large	Mobile	5	-	-
<i>Springal, arrow</i>	3 BP	Huge	1	10	+8	-
<i>Springal, rocket</i>	12 BP	Huge	1	10	+10	1d4F
<i>Trebuchet, light^L</i>	2 BP	Large	1	10	+0	1d6
<i>Trebuchet, standard^L</i>	4 BP	Huge	2	20	+0	2d4
<i>Trebuchet, heavy^L</i>	6 BP	Garg.	3	50	+0	2d6

^F A firedrake, firewurm, and rocket springal deal fire damage and can harm armies or wooden buildings and fortifications but does no damage to stone buildings or fortifications. If a battery of firedrakes, firewurms, or rocket springals is destroyed, it has a 50% chance to explode, dealing 2d6 points of damage to the artillerist unit manning it and half this amount to any army guarding the artillerists with the Screening Defense tactic. The explosion also creates light smoke (see **Visibility^{UB}**) on the battlefield, or thick smoke if light smoke is already present.

^L These siege weapons have exceptionally long range and can be set up in the Camp zone (see **Battle Zones^{UB}**) and are outside the range of ordinary ranged attacks. However, enemy siege weapons with similarly long range and enemies with the Magical Barrage command boon can attack siege weapons in the Camp zone as if they were in the Ranged zone.

their payload in a sling or cup that swings up and over the top of the weapon when released. Catapults are capable of hurling solid shot to attack hardened targets, scatter shot to pelt enemy armies with a rain of death, or even exotic and unusual payloads to spread fire, disease, and terror upon their enemies. Small catapults, called onagers, can be used on the decks of ships or in small fortifications, and are highly mobile (though the primitive sling-armed lithobolos is an immobile light catapult able to throw only solid shot) while their larger standard and heavy cousins, called mangonels, use two vertical skeins with a pair of torsion bow arms harnessed to the mangonel's throwing arm for greater power.

Firedrake: This apparatus contains a large reservoir tank and a series of pumps and conduits that unleashes a gout of alchemist's fire at close range. Firedrakes are direct fire weapons.

Fireworks: These alchemical skyrocketts, smoke pots, and other incendiaries do not deal direct damage to enemy armies, but they can be used to perform a special bombardment (incendiaries or smoke; see *Siege Tactics*) or in conjunction with the Battlefield Illumination or Smoke Screen command boons. Fireworks are single-use items and must be replenished in between battles. A unit may be equipped with more than one set of fireworks.

Firewurm: A firewurm is simply a larger and more powerful version of the firedrake, with larger-flow conduits and pressurized releases apertures that grant it a much greater range.

Springal: A springal uses a torsion-cranked composite paddle to strike a firing rack containing multiple bolts, which rain down in an arc over a burst area where they fall in a deadly hail of steel. A springal cannot target specific creatures but always affects an area. A rocket springal uses powder-fueled rockets to launch its bolts rather than a torsion paddle. Springals are indirect fire weapons.

Trebuchet: Trebuchets are siege weapons based on counterweight principles. Their appearance is similar to a catapult's, with the payload to be launched being placed into a sling, cup, or basket at one end of a long lever. The counterweight is then dropped close to the fulcrum (often with crew or draft animals pulling attached ropes, especially for heavy trebuchets), with the resulting leverage enabling a trebuchet to hurl massive projectiles. Trebuchets are too bulky to mount and move and must be assembled in place on the battlefield. Trebuchets are indirect fire weapons.

Cost: The cost in BP for a battery of four siege weapons of the appropriate type. Siege weapons can be added to a unit only in a settlement with an Exotic Artisan.

Size: The size of a siege engine determines how many batteries of that kind of weapon can be placed on board a ship or inside a fortification. A Large weapon takes up 1 space, a Huge weapon 2, and a Gargantuan weapon 4.

Setup: Some siege weapons can be moved whole, traveling with an army and ready to use, but many must be disassembled and then reassembled at the battlefield. A siege weapon that is Mobile can be moved as an army with a Speed of 1.

A siege weapon that is not Mobile cannot be moved intact and must be disassembled, carried with the army, and then reassembled at the battlefield, taking the listed number of Battle phases to set up. This number can be ignored if an army with siege weapons has ample time to prepare and set up the battlefield before the battle begins, such as an army defending a fortification or waiting in ambush. If this is not the case, the army must spend the listed number of Battle phases setting up the siege weapon. Unless they have exceptionally long range, siege weapons must be set up in the Ranged zone and are subject to ranged attacks by enemy armies while they are being set up.

Crew: The size of unit required to service and crew a battery of four siege weapons.

OM: This bonus applies to the weapon's OM on ranged attacks and siege tactics only.

Siege Damage: This is the damage dealt by the weapon when it targets a building, fortification, or other siege weapon. This damage is applied directly to the target's BP value (or its Fortification Points, if any).

CLOSE ASSAULT SIEGE WEAPONS

While the above siege weapons are designed to attack into or over enemy defenses at range, the culmination of most sieges (unless they end in surrender) is a massed melee assault on the defenses. Unsurprisingly, there are a variety of siege weapons specially designed to expedite this process and ensure success and at least partial safety for troops approaching the walls and then seeking to go over, under, or through them.

Assault Bridge: This is a sturdy but lightweight wooden framework, ranging from simple planking to more elaborate versions with folding supports, iron hooks, and rope railings, which is used to quickly span a gap that troops are otherwise unable to cross. If an Artillerist unit spends one Melee phase deploying an assault bridge, a gallery, ram, or siege tower unit can use it to cross a Moat. Alternatively, an assault bridge can allow a melee army attacking a fortification by Escalade, Infiltration, or Sapping to ignore the Defense bonus provided by a Moat.

Escalade Ladder: These ladders may be simple wooden affairs or grapples with knotted ropes attached, while the largest are carefully engineered and counterweighted levered mechanisms topped with hooked stanchions to cling onto battlements. Whatever their design, ladders are required to use the Escalade siege tactic without penalty (unless the attacking army has a climb speed or siege tower).

Gallery: This is a semi-mobile wooden frame clad in hides or planks to provide cover to soldiers underneath.

A battering ram and its crew can shelter under a gallery, providing protection while they attack the walls.

Mantlets: These are small, movable walls that can provide shelter to a small number of soldiers. Mantlets require no crew, as they are wheeled about by the soldiers using them for shelter.

Mine: A mine is a semi-portable alchemical explosive device, sometimes mounted on a wagon or boat, and maneuvered close to an enemy fortification or ship and then detonated. A mine deals full damage when used for sapping. A mine is a single-use weapon, but a unit can be equipped with more than one. If a unit equipped with a mine is routed or destroyed, there is a 50% chance the mine explodes, as described in [Table 14: Gunpowder Siege Weapon Misfire Result](#).

Minefields: Mines can also be deployed defensively, either buried underground or suspended underwater in naval combat settings, and in such cases are usually arrayed in minefields of numerous smaller mines rather than a single mine. When placing a hidden mine on the battlefield, make a Morale check modified by the unit commander's LB (camouflage) and LB (siege). The lower result of the two serves as the DC for opposed Scouting checks (see [Camouflage and Scouting^{UB}](#)). During any Battle Phase, there is a 50% chance that an enemy unit determined at random must make such a Scouting check or blunder into the hidden minefield, causing the mines to explode as described in [Table 14: Gunpowder Siege Weapon Misfire Result](#).

Ram: These heavy tree trunks, sometimes carried by strong warriors but often mounted on swinging ropes or chains mounted under mobile galleries, are used to make Sapping attacks against buildings. They cannot attack other armies. **Special:** A ram can be mounted on a galley and used to attack other ships or aquatic units that are comprised of Huge or larger creatures.

Siege Tower: These advanced galleries have a lower compartment where the crew moves the towers and an upper structure of covered ladders and shooting platforms from which ranged attacks can be made. An army traveling

in a siege tower unit can make ranged attacks, though it takes a -2 penalty to its OM. It cannot make melee attacks, however, except when using an Escalade siege tactic. If a siege tower is destroyed, it collapses dealing 2d6 points of damage to the crew and any army inside it.

Close assault siege weapons are used to protect other siege weapons or to protect troops approaching a fortification during an assault.

Cost: The cost in BP for a cluster of four siege weapons of the appropriate type. Siege weapons can be added to a unit only in a settlement with an Exotic Artisan.

Setup: The number of Battle phases it takes to erect these close assault siege weapons during once a battle begins, as described above. A Mobile siege weapon can move with its Artillerists with a Speed of 1.

Crew: The crew required to move and operate the siege engine; these crews represent an Artillerist unit as described above.

Army: The number of soldiers that can shelter within a close assault weapon, gaining its DV bonus. Alternatively, a gallery or siege tower can hold a battery of direct-fire or close assault siege weapons along with their crews:

Huge: light ballista, cannon

Gargantuan: ballista (heavy), cannon (fiend's mouth), firedrake, ram

Colossal: ballista (gate breaker), firewurm

OM: The OM of a battering ram applies only to melee attacks against fortifications; it has no effect against creatures.

Siege: The damage dealt to a target building, fortification, or siege engine's BP (or FP) for each round of successful attack, as described above.

DV: The close assault weapon provides this DV bonus to a number of soldiers equal to its capacity.

FP: The number of Fortification Points (FP) that must be depleted before the siege weapon's BP value can be directly attacked by enemy siege weapons.

TABLE 16: CLOSE ASSAULT SIEGE WEAPONS

WEAPON	COST	SETUP	CREW	ARMY	OM	SIEGE	DV	FP
Assault bridge	1 BP	1	10	-	-	-	-	-
Escalade ladder	2 BP	Mobile	10	-	-	-	-	-
Gallery, huge	2 BP	Mobile	10	20	-	-	+2	2
Gallery, gargantuan	4 BP	1	20	50	-	-	+2	4
Gallery, colossal	6 BP	2	50	100	-	-	+2	6
Mantlets	1 BP	Mobile	-	10-	-	-	+1	1
Mine	4 BP	Mobile	1	-	+5	2d10	-	-
Ram	4 BP	Mobile	20	-	+5	2d8	-	-
Siege Tower, large	3 BP	1	10	20	-	-	+2	3
Siege Tower, huge	6 BP	2	20	50	-	-	+4	6
Siege Tower, gargantuan	9 BP	3	50	100	-	-	+4	9
Siege Tower, colossal	12 BP	4	200	500	-	-	+4	12

SIEGE TACTICS

As noted above, the prosecution of a siege does not require any specialized weapons. In fact, given that defenders protecting their home know it intimately and will have a **Battlefield Advantage** (+2 bonus to OM and DV, as described in *Pathfinder Roleplaying Game Ultimate Campaign*) when fighting house to house in the streets and alleys inside their city, it may be the path of wisdom to simply starve them out or ravage the population hemmed in by your armies by unleashing fire and plague. In short, you have many options for reducing the strongholds of your enemies, both conventional and unconventional.

Blockade: This tactic relies on preventing people or goods from passing into or out of the blockaded city. *Requires:* 100 soldiers to blockade a city (if using the Ultimate Rulership rules, 50 soldiers can blockade a town, 20 soldiers a village). All armies being used to blockade the city must be defeated, destroyed, disbanded, or routed in order to end the blockade. If the city has a water border, a blockade takes double the normal amount of time to take effect, unless a shipboard army or army with a swim speed aids in maintaining the blockade.

Effect: No new buildings or improvements can be constructed within the blockaded settlement or the hex it occupies, and every week that the blockade continues, the defender's kingdom must succeed at Stability check with a penalty equal to the number of weeks the blockade has continued. If failed, all settlement bonuses provided by improvements in that settlement are reduced by 1, to a minimum of 0. In addition, the kingdom must succeed at a Loyalty check with a penalty equal to the number of weeks the blockade has continued or the city surrenders to the blockaders. This check is made with a +1 bonus per 100 soldiers inside the city (not counting emergency conscripts), but with a -1 penalty for each building that has been significantly damaged (more than

half its BP value), increased to -2 for each building that has been destroyed. Each Cistern or Granary within the city delays the effect of a blockade by 1 week. After 1 month of blockade, armies defending the settlement become fatigued and cannot remove this condition without magical aid.

If the city remains blockaded on your next kingdom turn, there is a 25% chance each kingdom turn that a dangerous

settlement event occurs in that settlement, as described in *Pathfinder Roleplaying Game Ultimate Campaign* and in expanded form in *Ultimate Rulership*. This event, if it occurs, is in addition to any settlement event that would normally occur.

Bombardment: This tactic is a besieging assault directed at the physical destruction of the city's buildings. If the attacking army has an accurate map of the city, such as from an (**Espionage Edict^{UR}**), it can target specific buildings. Lacking this information, the attacker may target large 4-lot buildings or can simply designate a city lot to attack without knowing exactly what building is being attacked.

Requires: A direct fire siege weapon can perform a bombardment of a building in a lot at the outer edge of a settlement but cannot target buildings farther in. If the settlement has City Walls, it can target the walls but cannot target buildings inside the walls, except for Castles or Watchtowers, and then only if they are in the outer edge of lots in the settlement. An indirect fire siege weapon can target buildings anywhere within a settlement. Both direct and indirect-fire weapons can target non-settlement fortifications such as Forts and Watchtowers.

Effect: During each Battle phase, the bombardment deals the **siege damage** of the siege weapon to the Build Point (BP) value of the improvement in the target lot. If the building takes enough damage to reduce its BP value below half, it becomes **damaged** and

ceases providing any benefits to the city or kingdom, except for the building's Defense value, which is halved (rounding down) if the building is damaged.

If reduced to 0 BP, the building is **destroyed**. A destroyed building must be rebuilt from scratch, but a damaged building can be repaired in one month as part of its owner's "construct a new building" Improvement Edict during their next kingdom turn.

Some buildings are hardened and durable and have a set quantity of Fortification Points (FP) in addition to their base BP value; until these FP are depleted, the building remains intact and no damage is done to its essential structure. If a battle ends and a building's FP have not been depleted, they are replenished at no cost and with no action required on the owner's next kingdom turn. If the building has actual BP damage, that damage must be repaired first before the FP are replenished.



TABLE 17: FORTIFICATIONS

BUILDING	BUILD POINTS (BP)	FORTIFICATION POINTS (FP)
Aerie	18	5
Barracks	6	10
Caster's Tower	36	10
Castle	60	80
City Walls	2	20
Fort	24	40
Garrison	30	20
Jail	14	10
Monastery	16	10
Palace	108	20
Watchtower	12	20

The besieger's siege weapons can attack the siege weapons of the defender and vice versa. Siege weapons have a base DV of 12 plus the twice the normal DV bonus of the siege weapon, though siege weapons can be protected by mantlets, galleries, and siege towers on the battlefield, and they gain the Defense bonus of any fortifications the defender has.

Bombardment, Special: A special bombardment involves using specialized payloads and unconventional weapons. Performing a special bombardment increases the attacking kingdom's Consumption by 1 each time it is used.

Requires: A catapult or trebuchet battery is required to use the plague special bombardment. A bombard, catapult, rocket springal, or trebuchet can be used to deliver incendiaries or smoke.

Incendiaries: A special bombardment with incendiaries deals normal damage to wooden buildings but minimum damage against stone buildings. In addition, at the end of each Battle phase the defender's kingdom must succeed at a Stability check to prevent a fire. This check is made with a +2 bonus if the building in the target lot is made of stone, with an additional +2 bonus for each Cistern, Waterway, or water border adjacent to the lot, and a +1 bonus for each Cistern or Waterway lot anywhere else in the settlement and a +1 bonus for each water border (not each lot along a border; just +1 per border). Armies can also be sent to help fight the fire, providing a +1 bonus to the Stability check for every 20 soldiers sent to battle the flames. If the check succeeds, the fire is extinguished. If the check fails, the fire spreads throughout the lot and continues to burn and spreads into an adjacent lot, spreading throughout a multi-lot building first before it spreads to another building. This fire produces light smoke in the target settlement, or thick smoke if light smoke is already present.

At the end of each Battle phase that a building continues to burn, a new Stability check must be made. Success extinguishes one lot. Failure allows the fire to spread to another adjacent lot. If there is more than one separate fire in the settlement, in non-adjacent squares, checks to fight any of the fires take a -2 penalty for each non-adjacent fire. Fire cannot spread across City Walls or a Moat, nor can it

spread into a Cistern or Waterway (even if there is a bridge). If a building remains on fire at the end of consecutive Battle phases, it becomes **damaged** (reduced to half its normal BP value). If it remains on fire at the end of three consecutive Battle phases, it is **destroyed**.

Plague: Each time you perform a plague bombardment, choose one army at random within the city. The defending kingdom must succeed at a Stability check or that army becomes infected (see Disease, under **Healing After Battle^{UB}**). In addition, each plague bombardment has a 10% (non-cumulative) chance to cause a Plague kingdom event inside the target settlement, as described in *Pathfinder Roleplaying Game Ultimate Campaign*. This event, if it occurs, is in addition to any other kingdom events that may occur.

Smoke: Each smoke bombardment creates light smoke inside the settlement or fortification until the end of the next Battle phase. If light smoke already exists, it becomes thick smoke.

Escalade: An escalade is an attempt by attacking armies to scale the walls.

Requires: Escalade ladder, siege tower, or an army with a climb speed.

Effect: The attacking army chooses one army within the target fortification to attack. During the escalade, the attacking army takes a -4 penalty to its OM and DV (reduced to -2 if the attacking army has a Climb speed) and must allow the defending army to make a melee attack against it first; this is an exception to the standard rule that mass combat is simultaneous. If the defending army's attack succeeds, the attacker must succeed at a Morale check with a penalty equal to the damage it was just dealt by the defending army. If this Morale check fails, the attacking army is driven back and is unable to attack. If the Morale check succeeds, the attacking army can continue with its attack, and although the attack takes a -4 penalty the defending army gains only half the normal Defense bonus from whatever fortification it is defending.

If the attacking army's attack fails, its escalade is thwarted and it automatically disengages from the defending army. If its attack succeeds, however, the attacking and defending armies are now engaged atop the fortification, and for as long as they remain engaged the attacking army's OM and DV penalties are halved and it ignores the fortification's Defense bonus when resolving attacks against the defending army. If the defending army is defeated or routs, the attacking army can occupy the fortification and gain its Defense bonus to its own DV for the remainder of the battle; however, the attacking army is now somewhat isolated in its breach into the fortifications and it takes a -4 penalty on Morale checks it makes to withdraw or retreat.

Note that an escalade targets one particular fortification, and occupying one fortification does not obviate the Defense bonus of other fortifications. City Walls are a special case, as once an attacking army has successfully escalated them they can ignore their Defense bonus for the remainder of the battle. These walls provide less advantage



to an army atop them fighting other armies inside the city than they do against armies outside; if fighting a defending army from atop a City Wall, treat this as holding the high ground (see **Terrain^{UB}**) rather than applying the City Wall's Defense bonus.

Infiltration: This siege tactic also seeks to circumvent the fortifications, but through guile and stealth rather than naked bravado in scaling the walls. In an infiltration, the attacking army tries to slip inside the fortification and open a gate or sally port or otherwise compromise the defenses. Every defending army is entitled to a Scouting check with a +2 bonus, opposed by the infiltrating army's Camouflage. If the infiltration is detected, the unit noticing the infiltrators can attack them. While a small force is highly effective at remaining unnoticed, if it is spotted it may be easily crushed by the defenders. If the defending army's attack succeeds, the infiltrating army must retreat from the fortification if it survives. If the attack fails, the infiltrators evade capture, assuming no other defending armies do not spot them, or if they spot them fail to successfully attack them.

If the infiltration is not detected, the infiltrators are able to open up access to the fortification for one allied army. That army can attack one of the defending armies as if it

had performed an escalade, though without taking the -4 penalty to OM and DV.

Sapping: This tactic involves trying to dig, mine, undermine, burrow, or smash through or under the walls. The attacking army makes a melee attack against a DV equal to 15 plus twice the building's Defense modifier (if any). A successful attack deals half damage to the building's BP (or FP, if any); sapping deals full damage if the attack is performed with a ram.

Volley: This tactic simply refers to targeting enemy armies with springals or direct-fire siege weapons. This is resolved as a standard attack in the Ranged phase, using the attacking unit's OM adjusted by the bonus provided by the siege weapon.

Volley, Scatter: When indirect fire weapons (other than springals) are used for volley attacks, they typically are loaded with scatter shot of some type, affecting all targets in an area, though with highly variable accuracy. An indirect fire siege weapon battery adds 2d6 to its OM when making this attack against the target army, but on a successful attack the damage it deals is equal to half the weapon's Siege damage rather than being determined by its OM and the defender's DV. If the target army is engaged, any armies engaged with it take 1/2 the damage the target army takes. This is considered friendly fire damage.

MAGICAL SIEGE WEAPONS

Siege weapons are described in greater detail in the *Siege Warfare* section and in Chapter 3 of *Pathfinder Roleplaying Game Ultimate Combat* under *Siege Engines*. The following section describes several types of siege weapons and ammunition.

Pricing: The following items are assigned a price in gold pieces for characters who wish to purchase them with their own personal resources, whether to use in adventuring or in a small-scale engagement using standard Pathfinder rules for combat and for the purpose of crafting them themselves using the standard magic item creation rules.

For the purposes of the kingdom-building rules presented in *Pathfinder Roleplaying Game Ultimate Campaign* and in *Ultimate Rulership* and *Ultimate Battle*, kingdoms may be able to acquire such items at the GM's discretion by issuing a **Commission Edict^{UR}** or through possible random generation in the kingdom's magic item slots. In addition, if a settlement's gold piece limit equals or exceeds the price of the items in question, the GM may allow these magical banners and siege weapons to be purchased with kingdom resources by spending the listed BP cost. This is the cost to upgrade a normal battery of *siege weapons* to these magical properties; it is not the cost to simply buy these siege weapons outright. This BP cost is not considered part of the item's BP value if it is targeted by an attack (see **Bombardment**, under *Siege Tactics*).

TABLE 18: MAGICAL SIEGE WEAPONS

PRICE (GP)	PRICE (BP)	ITEM NAME
4,000 gp	+2 BP	<i>elemental siege shot</i>
4,000 gp	+2 BP	<i>ooze siege shot</i>
4,000 gp	+2 BP	<i>zombie siege shot</i>
8,000 gp	+4 BP	<i>zombie apocalypse siege shot</i>
16,000 gp	+8 BP	<i>adamant ram</i>
16,000 gp	+8 BP	<i>blizzard ballista</i>
16,000 gp	+8 BP	<i>thunderbolt cannon</i>

BALLISTA, BLIZZARD PRICE 16,000 GP

Slot — CL 10th Weight variable
Aura moderate evocation

DESCRIPTION

This rime-glazed ballista launches spears of solid ice, which it coalesces from the air around it. It needs no ammunition and only one-half the normal crew of a ballista of its size. A **blizzard ballista** gains a +1 bonus on damage rolls when making *volley* attacks, and it also gains a +2 bonus on RV and damage against armies primarily comprised of creatures with the fire subtype. In addition, even missed shots from a *blizzard ballista* leave swaths of ice and slush strewn across the battlefield. An army targeted with a *blizzard ballista* has its movement reduced by 1

(minimum 1) for the remainder of the current Battle Phase.

In an adventuring situation on the battlefield, a *blizzard ballista* functions as a +1 *icy burst ballista*, and creatures struck by the ballista are sheathed in ice that functions as a tanglefoot bag (DC 15 Reflex negates). After attacking with a *blizzard ballista*, it requires 1 minute for the device to create a new ice spear and be ready to use again.

CONSTRUCTION REQUIREMENTS Cost 8,000 GP
Craft Magic Arms and Armor, *major creation*

CANNON, THUNDERBOLT PRICE 16,000 GP

Slot — CL 10th Weight variable
Aura moderate evocation

DESCRIPTION

This copper-bound cannon launches bolts of raw electricity that strike with pounding peals of thunder. A *thunderbolt cannon* needs no ammunition and only one-half the normal crew of a cannon of its size. It cannot be used as an indirect-fire siege weapon. A *thunderbolt cannon* gains a +1 bonus on damage rolls when making *volley* attacks, and it also gains a +1 bonus on RV and damage against armies equipped with medium or heavy armor (see **Table 4: Equipping an Army^{UB}**). In addition, the deafening shots of a *thunderbolt cannon* make it difficult for the target of its attacks to relay or respond to orders even on a missed attack, resulting in a -1 penalty on Morale checks made to change Strategy, Tactics, or formation or to disengage with an opposing army or unit. This penalty lasts until the Tactics Phase of the following Battle Phase.

In an adventuring situation on the battlefield, a *thunderbolt cannon* functions as a +1 *shock thundering cannon* that gains a +3 bonus on attack rolls against creatures wearing metal armor. In addition, on a hit (or even on a miss, if the *thunderbolt cannon*'s attack roll would have been sufficient to hit the target's touch AC), the target is treated as if a thunderstone had detonated in its space. After attacking with a *thunderbolt cannon*, it requires 1 minute for the device to recharge and be ready to use again.

CONSTRUCTION REQUIREMENTS Cost 8,000 GP
Craft Magic Arms and Armor, *major creation*

RAM, ADAMANT PRICE 16,000 GP

Slot — CL 10th Weight variable
Aura moderate conjuration

DESCRIPTION

This devastating close assault weapon shatters almost any barrier in its path. When used to perform a *sapping* attack, an *adamant ram* doubles its OM bonus to +10 and deals 3d8 points of damage. If attacked by another siege weapon, an *adamant ram* takes normal damage rather than double damage, as it lacks the *fragility* of other siege weapons.

In an adventuring situation on the battlefield, an *adamant ram* is a +1 *adamantine ram* with a pick

head. Attacks made with it add a +5 bonus on Strength checks against the target object's break DC, and if used to attack the target object's hit points attacks with the *adamant ram* ignore hardness of less than 20 and are treated as adamantine and magic for the purpose of overcoming damage reduction.

CONSTRUCTION REQUIREMENTS	COST 8,000 GP
Craft Magic Arms and Armor, <i>major creation</i>	

SIEGE SHOT, ELEMENTAL PRICE 4,000 GP

Slot — CL 11th Weight variable
Aura moderate conjuration

DESCRIPTION

This enchanted stone bursts upon impact after being launched by a cannon, catapult, trebuchet, or similar siege weapon. After dealing damage, the stone shatters and releases a Huge elemental of a type designated by the creator of the *elemental siege shot*. This elemental is treated as a temporary Hero army (see **Table 3: Army Size^{UB}**) with ACR 3 that attacks for one Battle Phase and then is automatically destroyed.

In an adventuring situation on the battlefield, the elemental has normal statistics for a creature of its kind and remains present for 11 rounds, attacking nearby creatures or destroying nearby objects until destroyed or until its summons ends.

CONSTRUCTION REQUIREMENTS	COST 2,000 GP
Craft Magic Arms and Armor, <i>summon monster VII</i>	

SIEGE SHOT, OOZE PRICE 4,000 GP

Slot — CL 11th Weight variable
Aura moderate conjuration

DESCRIPTION

This enchanted black stone bursts upon impact after being launched by a cannon, catapult, trebuchet, or similar siege weapon. After dealing damage, the stone shatters and releases a black pudding. This ooze is treated as a temporary Hero army (see **Table 3: Army Size^{UB}**) with ACR 3 that attacks for one Battle Phase and then is automatically destroyed.

In an adventuring situation on the battlefield, the pudding has normal statistics for a creature of its kind and remains present for 11 rounds, attacking nearby creatures or destroying nearby objects until destroyed or until its summons ends.

CONSTRUCTION REQUIREMENTS	COST 2,000 GP
Craft Magic Arms and Armor, <i>conjure black pudding</i>	

SIEGE SHOT, ZOMBIE PRICE 4,000 GP

Slot — CL 10th Weight variable
Aura moderate conjuration

DESCRIPTION

This mass of corpses is lashed together and imbued with dreadful necromantic power. When used to perform a plague bombardment during the Ranged

Phase, during the Melee Phase the corpses animate as 20 plague zombies. These zombies are treated as a temporary squad (see **Table 3: Army SizeUB**) with ACR 1 that attacks for one Battle Phase and then is automatically destroyed. In addition, if the zombies damage an army with their melee attack, the kingdom's Stability check to resist that army contracting disease takes a -2 penalty and the chance of a Plague event in the city is increased to 15%.

In an adventuring situation on the battlefield, the plague zombies have normal statistics for creatures of their kind as described in the *Pathfinder Roleplaying Game Bestiary* and attack all nearby living creatures until destroyed.

CONSTRUCTION REQUIREMENTS	COST 2,000 GP
Craft Magic Arms and Armor, <i>animate dead, contagion</i>	

SIEGE SHOT, ZOMBIE APOCALYPSE PRICE 8,000 GP

Slot — CL 10th Weight variable
Aura moderate conjuration

DESCRIPTION

This mass of corpses is lashed together and imbued with dreadful necromantic power. When used to perform a plague bombardment during the Ranged Phase, during the Melee Phase the corpses animate as 20 apocalypse zombies. These zombies are treated as a temporary platoon (see **Table 3: Army Size^{UB}**) with ACR 4 that attacks for one Battle Phase and then is automatically destroyed. In addition, if the apocalypse zombies damage an army with their melee attack, the kingdom's Stability check to resist that army contracting disease takes a -4 penalty and the chance of a Plague event in the city is increased to 25%.

In an adventuring situation on the battlefield, the apocalypse zombies have normal statistics for creatures of their kind as described on d20fsrd.com (and the bestiary section of Adventure Path #45) and attack all nearby living creatures until destroyed.

CONSTRUCTION REQUIREMENTS	COST 4,000 GP
Craft Magic Arms and Armor, <i>animate dead, contagion</i>	

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