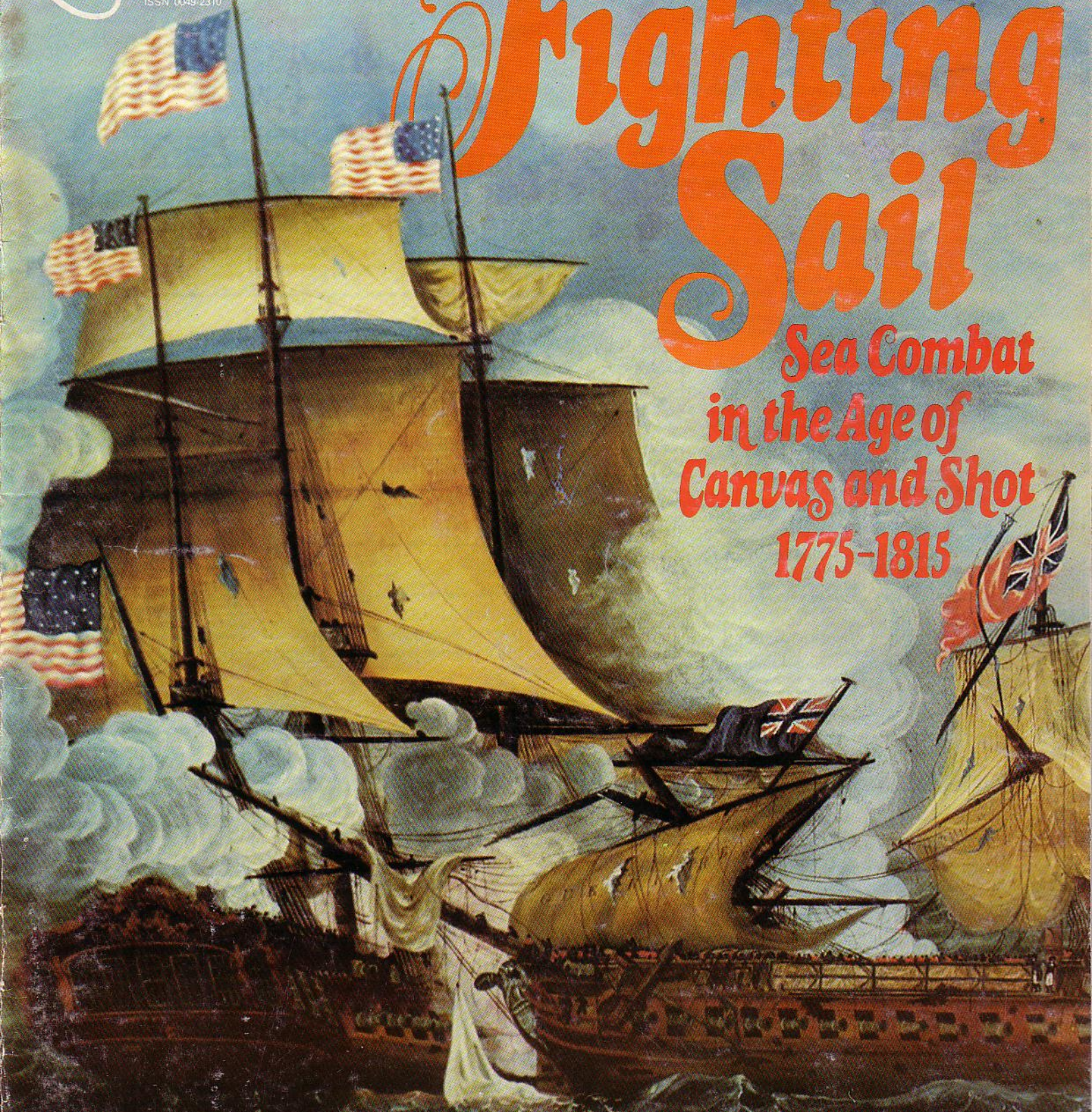


# Fighting Sail

Sea Combat  
in the Age of  
Canvas and Shot  
1775-1815



**PLUS: Singapore: The Campaign for Malaya**

*Progress reports on the development of the simulation games  
Jackson at the Crossroads, Corinth, Roads to Moscow, Singapore, Spies*

**FYI: Quality of 19th Century Infantry • SPECIAL: Awards Ballot pg. 29**





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## Looking Ahead to Next Time

*S&T* 86 will feature *Cedar Mountain*, a simulation of the 1862 battle of that name using the *Great Battles of the Civil War* game system. Also included will be three short articles on Civil War battles (Cedar Mountain, Port Republic, Cross Keys, and Corinth) and a full-length article by Al Nofi on the Alamo. Plus our regular features.

## When to Expect Number 86

**Domestic Subscribers:** If you have not received your copy of *S&T* 86 by 17 July 1981, notify our Customer Service Department. Please include your Customer Code and issue of sub expiration, both of which should be found on this issue's mailing label, just above your name. **Foreign Subscribers:** Add eight weeks to the above date to allow for the leaden pace of international mail.

The  
**Universe**  
can be yours  
(in July)

## Outgoing Mail

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## WORKS IN PROGRESS

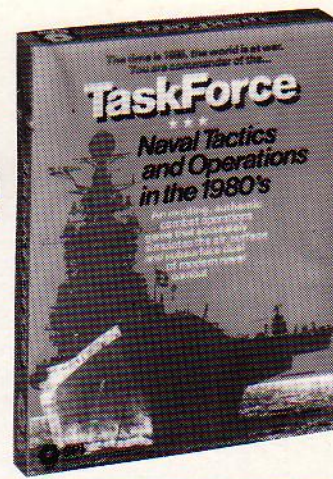
The following list includes all unpublished projects currently being worked on. The listing for each game includes the title, subject, designer, developer, and a one-word description of the current status of the game. These descriptions include **Design** (the game is currently being designed); **Develop** (the game is currently being tested either at SPI or by outside blindtesters working under the watchful eyes of the R&D staff); **Edit** (development work on the game is completed, at least in the opinion of the developer, and the game is being prepared for turn-in to the Art Department); **AD** (the Art Department is copyediting and

[continued on page 13]



# TaskForce

*Task Force* is a highly realistic simulation of modern naval combat. Three of the most critical ocean-going routes — the Mediterranean, the Norwegian, and the Caribbean Seas — are represented on the game map. *Task Force* contains two identical 22" x 34" maps, 440 single and double-sized counters, rules booklet, and various playing aids. The 12 scenarios are presented in four levels of complexity, from introductory to tournament. Additionally, instructions are included to allow players to create new scenarios, using the major fleets of the world and their key ships that are represented in the countermix.



**TRACK**

**UK.CV** Invincible  
S 3 10H\*

**SQUALL**

## [19.3] FLEET DISPLAY

SHIP NAME	FLOT VALUE	HITS (X = Flo; O = Sys)	SSM's FIRED

**NAVAL VESSELS (US)**  
**Front (Electronics)**

Type: US.DD Peterson  
Nationality: S 2 2H  
Active ASW Capability: 2  
Helicopters: 2H  
Flotation Value: 2

**Back (Combat)**

Type: US.DD Peterson  
Nationality: 2\* 3 2B 3 A8  
ASW Value: 2\* 3  
AA Value: 2  
Jamming Value: 3  
SSM Value: A8  
Gunnery Value (Torpedo Value, if submarine): 2

**Subron 1**  
Shallow

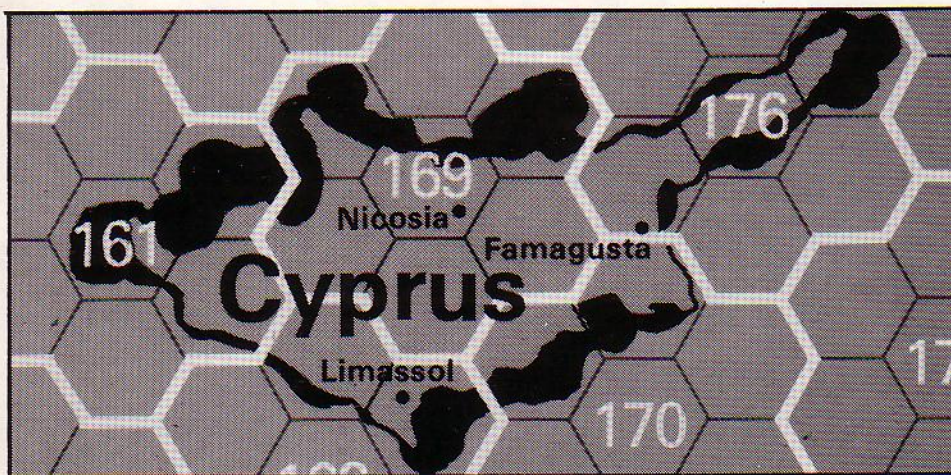
**SOSUS**

**SSM B**  
Standard  
2 M 2\*

**ENEMY**

**REAR ADMRL**  
★ +2

**US A7**  
2 M 4



**Task Force: \$18**  
**Now Available**  
**in Stores Nationwide!**

**SSM COUNTER**

Abbreviation: SSM A  
Name: Harpoon  
Range: 2\* 4  
Accuracy Value: 4

## BUYER'S GUIDE FOR TASK FORCE

**Age Range:** 12 years to adult  
**Number of Players:** 2  
(Low solitaire suitability)  
**Average Playing Time:** 2 hours  
**Complexity:** Moderate (6.5)  
For purposes of comparison, *Monopoly* is considered to have a complexity rating of 2.34.

## AIR SQUADRON (US)

**Front**

Nationality: US Type: F14  
Designation: 151  
AA Value: 4 Strength: 4  
Strike Value: 4

**Note:** Some aircraft, indicated by a colored band across the counter, possess all-weather capabilities (28.1). Also, a Strike Value followed by an asterisk (\*) indicates that an aircraft possesses long-range ASM's (32.3).





*USS Bonhomme Richard in action with HMS Serapis, 23 September 1799 (Courtesy United States Naval Academy Museum)*

"Put your helm-a-weather, if you please Mister Longstaff," said the American captain. "Aye aye, sir," replied the quartermaster, spinning the ship's wheel furiously to larboard with the aid of another seaman. The American ship made a graceful turn to the left, drawing up on a parallel course with a sleek, yellow and black British frigate at about 50 yards distance. In the night's blackness, the American sailors could just begin to visualize the enemy vessel as the ships sailed together. "Hold her steady!" said the captain.

"Mister Dale, have you verified that all slow-matches in the match tubs are properly alight?" "Aye aye, sir," the first lieutenant replied. A loud shout directed at the American warship pierced the night's calmness. The Yankee captain could clearly make out two British officers standing under their ship's stern lanterns on the poop deck, one with a speaking trumpet to his lips.

# Fighting Sail

## Sea Combat in the Age of Canvas and Shot 1775-1815

by Joseph Balkoski



"What ship is that?" came the expected query.

The captain whispered into Dale's ear. "*The Princess Royal*," Dale shouted in reply.

"Where from?" came the immediate response from the British warship.

No reply was given.

"Where from?" the British officer repeated. "Answer immediately or we shall be under the necessity of firing into you!"

At last, the American captain sprung into action.

"Mister Dale, lower that flag and raise the American colors!" The American ship had been flying a British ensign in order to reach close quarters before the start of the inevitable engagement. "Gun captains, take your aim! Fire!"

The shattering explosions of the American and British cannon shook both ships violently. The well-known battle between the frigate *USS Bonhomme Richard*, under the command of Captain John Paul Jones, and the new British frigate *HMS Serapis*, commanded by Captain Richard Pearson, had begun. Without doubt, this confrontation was the most violent and prolonged engagement between two ships in the history of naval warfare.

### John Paul Jones

The name of John Paul Jones was not unfamiliar to the ears of Captain Pearson, nor in fact to any officer of the Royal Navy during the years of the American War of Independence. Born in Scotland in 1747, Jones emigrated to America following an undistinguished career in the merchant navy. He joined the fledgling Continental Navy in 1775, rising to the rank of captain on the European station by 1778. "It appears to me to be the province of our Infant Navy to surprise and spread alarm with our fast sailing ships," he remarked at this time. "When we grow stronger, we can meet their fleets and dispute with them the sovereignty of the Ocean."

Operating out of French ports, Jones proceeded to carry out his naval philosophy. In the spring of 1778, he cruised in the Irish Sea with the brig *USS Ranger*, twice raiding the west coast of Great Britain and taking the sloop-of-war *HMS Drake* as a prize.

The name of John Paul Jones spread like wildfire around the British Isles. No party had successfully raided a British port for over one hundred years. His daring was even acknowledged by his enemies. A popular Scottish ballad of the day ran:

"Have you heard o' Paul Jones?

Have you not?

A rogue and a vagabond,

Is he not?

He came to Selkirk,

Did he not?

Robbed the plate and jewels,

Which did his conscience gall,

Did it not?"

In 1779, Jones outfitted a new squadron of four warships to continue his *guerre de course* campaign on a grander scale. "I wish to have no connection with any ship that does not sail fast, for I intend to go in harm's way," he stated defiantly. For his personal command, Jones obtained a 13-year old weather-beaten East Indiaman that had been recently converted to a 40-gun frigate. This ship, the *Duc de Duras*, was renamed *Bonhomme Richard* by Jones. A motley collection of American, French, Danish, Dutch, Portuguese, Irish, and even English sailors was gathered to man the ships of Jones' squadron.

On 9 August 1779, Jones and his squadron set sail from Lorient, commencing a cruise around the length and breadth of the British Isles, following the western coast of Ireland to the Hebrides

and, following that, to the Orkney and Shetland Islands off the north coast of Scotland. The voyage started out very profitably — a number of British privateers and merchantmen were taken as prizes, although Jones quickly discovered that the only ship that he could implicitly rely on was his own *Richard*. The other ships of his squadron were under the command of independent-minded Frenchmen who ignored Jones' nominal control of the squadron and operated independently for most of the voyage. Nevertheless, Jones' ships continued their raiding down the eastern coast of Scotland and England in early September. On 16 September, *Richard* made a daring raid up the Firth of Forth under the very walls of the imposing Edinburgh Castle. On 23 September, Jones sighted Pearson's *Serapis* off Flamborough Head in Yorkshire, escorting 41 merchant vessels from Denmark to London. It was obvious to Jones that if he wished to disperse or destroy the lucrative convoy, he would have to engage *Serapis* in battle single-handedly and defeat her.

### The Battle

After the two antagonists delivered their initial devastating broadsides at one another at point-blank range, Jones immediately calculated that *Serapis'* heavier and more numerous armament would inflict fatal damage on *Richard* should a simple exchange of gunfire ensue. Therefore, Jones elected to grapple his ship to Pearson's and to try to take his opponent by boarding. Jones ordered his sails backed, slowing his momentum and allowing *Serapis* to pass her. He then had his helm put hard over to starboard and attempted to cross *Serapis'* stern in order to "rake" her with his fresh, double-shotted port broadside. By such a maneuver, all of *Richard's* guns would bear down the length of her opponent's hull, while *Serapis* would be unable to reply at all to the American vessel. A single successful rake could place a powerful man-of-war out of action.

However, Pearson anticipated this move and replied with an equally-intricate maneuver of his own which was intended to prevent *Richard* from grappling with *Serapis* while pounding Jones's ship to a wreck with cannon fire. The battle was fast developing into a duel of wits between the two captains, as the antagonists maneuvered around one another like clumsy boxers. Periodically, Jones would succeed in fouling *Richard* with *Serapis*, but, not satisfied with his grappling position, would back off. Similarly, Pearson's strategy was occasionally fulfilled when the British warship succeeded in bringing her heavy guns to bear on *Richard's* hull at close range. This fire caused devastating damage to Jones' vessel (some of it below the waterline), but the American captain refused to consider striking.

Through superhuman efforts and intricate maneuvering, Jones finally succeeded in bringing *Richard* into a desirable grappling position — one in which the two enemy vessels were not to be separated until one party emerged victorious. To Jones' delight and Pearson's disgust, *Serapis'* anchor (situated on her starboard bow) hooked firmly onto the wood planking of *Richard's* stern, unbreakably locking the ships together.

"Well done, my brave lads! We have got her now!" cried Jones as he personally snatched rigging that was hanging from *Serapis'* jib and lashed it securely to *Richard's* mizzenmast. "Throw the grappling irons on board her and stand-by for boarding!" he yelled above the deafening din.

Due to Jones' efforts (and the subtle effects of wind and tide), the two men-of-war slowly came together, side-by-side, *Richard's* bow pointing north, *Serapis'* pointing south.

At this point, the battle entered an even more violent stage, as both captains' boarding attempts

were stymied by accurate musket fire and grenade-throwing from the ships' "fighting tops." In fact, the upper decks of both vessels were virtually cleared of sailors during these fusillades, making any determined boarding attempt well-nigh impossible. Meanwhile, both ships' cannons blazed away at point blank range, *Serapis'* heavier ordnance smashing *Richard's* weather-beaten woodwork to bits. Within a half-hour, Jones' armament was reduced to three small 9-pounders — and due to the heavy casualties, Jones had to help crew one of these pieces himself.

Amid the carnage and commotion, an American sailor rushed up to Jones. "For God's sake, captain!" he yelled above the din. "You must strike!"

"I will sink first!" Jones replied angrily. "I will never strike!"

"The battle continued with unrelenting fury," Jones later wrote. *Richard* had seven feet of water in her hull and was taking in more at an alarming rate, regardless of the efforts of the men at the pumps. Even a few of Jones' officers were now beginning to urge their captain to strike his colors, but Jones was determined not to fail. Meanwhile, two petty officers — Henry Gardner, the chief gunner, and John Gunnison, the chief carpenter — took matters into their own hands. They raced aft and seized the American colors. "Quarter!" they cried. "For God's sake, quarter!"

Jones reacted immediately and violently. He rushed towards his men, brandishing his pistols — in full view of Captain Pearson, standing only a few feet away on the deck of *Serapis*.

"What damned rascals are they! Shoot them! Kill them!" Jones cried. Gunnison turned and fled from his captain's wrath. Gardner spun around just in time to see Jones' pistol flung at his head. The force of the blow knocked him senseless at the foot of the quarterdeck ladder.

"Sir, do you ask for quarter?" Pearson shouted from *Serapis*. "I repeat, do you ask for quarter?"

"No, sir. I do not ask for quarter!" Jones cried, now in an absolute fury. "I have not yet begun to fight!"

Very fortuitously for Jones, an American seaman manning *Richard's* tops successfully hurled a hand-grenade directly down one of *Serapis'* hatchways at this time, exploding magazine ammunition and setting the British ship partially afire. Only four British cannon were now in working order (although Jones only had three). The fire of these seven pieces had become only intermittent — the primary noise of the battle was now simply shrill human voices, mostly emitted by the wounded men below decks on both ships. Suddenly, *Serapis'* 140-foot mainmast cracked and gave way, falling over the side of the vessel with a thundering crash. This setback was the last straw for Captain Pearson.

"Sir, I have struck!" he shouted to Jones. "I ask for quarter!"

"If you have struck, haul down your ensign!" Jones shouted in return.

Pearson walked aft, ripped the British colors from their staff, and came onboard *Richard* to confer with his American rival. Jones refused to accept Pearson's sword when it was offered.

"Sir, you have fought like a hero and I am certain that your sovereign will reward you," Jones said in consolation. The three and one-half hour battle was finally over.

### The Age of Fighting Sail: The Ships

It is fair to assume that the Age of Fighting Sail began in the late 16th century and continued until the introduction of steam power at sea on a



large scale in the mid-19th century. With the defeat of the Spanish Armada in 1588, naval gunnery came into preeminence at the expense of the tactic of close-action. From this moment on, warships were primarily designed to house guns and were trained to fight with these guns according to distinct and rigid tactical concepts. The science of warship construction during this era and the art of applying these tactical concepts to battle reached their zeniths during the years of the American War of Independence and the Napoleonic Wars — from 1775 through 1815.

Throughout most of the Age of Fighting Sail, the technology of warship construction changed very little, if at all. Warships were classified into various categories, although these classifications could be performed in a myriad of ways. The most popular means of classification was by *rate*, or number of guns carried onboard. A *first-rate* was considered any ship that possessed 100 or more guns. A *second-rate* carried between 90 and 99 guns, a *third-rate* between 64 and 80, a *fourth-rate* between 50 and 60, a *fifth-rate* between 32 and 44, and finally, a *sixth-rate* between 20 and 28. Most ships belonging to the major navies of the world were third or fifth-rates. Any other type of vessel was considered somewhat unusual.

Another popular means of classification was by a ship's general method of construction or appearance. A *ship-of-the-line* was any vessel that was large enough to take its place in the "line" of battle — usually, a first, second, or third-rate. A *frigate* had the outward appearance of a ship-of-the-line, but was lighter, faster, and had more graceful lines than its big brother. A frigate could be a fourth or fifth-rate, although they were usually too small to take part in fleet engagements — their typical method of employment was in reconnaissance, merchant raiding, or as convoy escorts. A *sloop-of-war* (or *corvette* in the French service) was simply a small frigate — a sixth-rate. A *schooner* was a small warship of under 20 guns whose sail pattern was "fore-and-aft rigged" — that is, whose sails were unfurled down the axis of the ship's hull rather than perpendicular to it (as was the case in "square-rigged" ships, which almost all men-of-war in this era were). A *cutter* was simply a small schooner. A *galley* was a ship that could be propelled by oars or sails. These ships continued to see service in this era, especially in the Mediterranean Sea or on inland waterways or lakes. A number of other varieties of warships were employed by the naval powers during this era (including brigs, bomb ketches, and clippers), but their use was not widespread.

## Anatomy

All warships are constructed for the purpose of engaging the enemy in battle. In the 18th and early 19th centuries, men-of-war were built according to a complex series of design compromises, all of which attempted to encompass the wide array of tactical considerations that were deemed vital at the time.

Of course, the primary consideration for a ship's designer was to employ her armament effectively. Because of the inaccuracy and very limited rate of fire of the ordnance used during this era, it was imperative to place as many guns as possible onboard — the quantity of guns making up for their inefficiency (or so it was thought). As a result, ships were armed with cannon along their port and starboard sides, arranged in rows on *gun decks*. The height from the keel of a warship to its upper gun deck was thus considerably higher than on a merchant vessel — so much so that men-of-war could easily become top-heavy and capsize unless heavy ordnance and ballast were placed as low as possible onboard her.

Additionally, an important element of gunnery was ship stability. Since narrow-built ships

pitched and rolled violently on the high seas, a large man-of-war was constructed with a relatively wide hull. As a result, a gun could be fired with greater accuracy due to the more stable platform.

The large number of men that were needed to work each gun onboard a man-of-war called for larger crews than in civilian ships of comparable sizes. Moreover, huge amounts of space had to be allocated to the provisioning of these crews, especially considering that warships could spend over a year continuously at sea.

Because seamen had to operate a warship's armament while it was being fired at by the enemy during battle, it was also important for the vitals of the ship to be protected to the fullest extent possible, from both enemy fire and the recoil shock of one's own weapons. As a result, a man-of-war's outer bulwarks were extremely thick and strong — usually white oak of at least seven inch thickness.

All of the above considerations necessitated that a ship's hull be extremely heavy, wide, and cursed with a deep draft. Herein lay the designer's major problem: how to move this monster through the water at an acceptable speed. The answer lay in the spread of as much canvas as possible to the wind. This canvas, or *sails*, had to be unfurled on *yardarms*, which were braced to *masts*. Usually, three such masts were fit into the hull of a warship, securely anchored into her keel. The masts were projected straight up through the ship's decks, often taller than 200 feet. These masts were known as the *foremast* (in the ship's bow), the *mainmast* (in her center), and the *mizzenmast* (in her stern). The taller the masts, the more yardarms it could carry, and as a result, the more sails it could unfurl to the wind (although care had to be taken to keep the ship from becoming top-heavy). For example, the mainmast could have the following sails hung from various yardarms along its trunk: the mainsail (nearest the ship's deck), main topsail, main topgallant sail, main royal, and the main staysail (at the top of the mast).

Additional canvas was also unfurled from a variety of miscellaneous spars, such as the *bowsprit* (always placed in the bow of a ship at an exact angle of 36° to the horizon), the *jib boom* and the *spanker*. In order to get the utmost speed out of a man-of-war, special sails could be unfurled off the vessel's port and starboard sides. These were known as *studding sails*, but their use severely restricted the maneuverability of any ship using them.

Masts, spars, and yards were secured in place by *rigging* and *braces* — an elaborate network of ropes and lines that not only held everything together but also allowed adjustment of the yardarms when the ship was performing maneuvers. Upon the command "Hands to the braces," seamen would rush to predetermined pieces of rigging to haul or let go on the yards so that they would swing into proper alignment with the wind.

Regardless of the huge amount of canvas that men-of-war unfurled to the wind, these vessels were still extremely slow-moving — especially by civilian shipping standards. A ship-of-the-line was exceptional if it could manage eight knots at its best point of sailing. Many merchant vessels could obtain fifteen knots or more. Occasionally, military sea captains could increase the speed of their vessel by a variety of methods — especially under duress. These methods included reducing the weight carried onboard by dropping material, especially ordnance, overboard. Similarly, "kedging" (dropping the anchor by row-boat in front of the vessel and hauling the ship towards it) and "wetting the sails" (moistening the sails to allow them to catch the wind more efficiently) could increase the speed of a warship to a small degree.

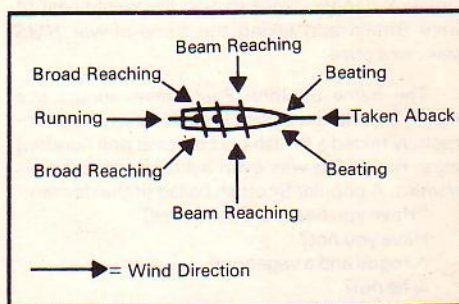
An additional consideration in warship design that became increasingly important in the late 18th

century was *durability* — the ability of a ship to remain in commission for decades without extensive periods of overhaul. In the mid-1700's, it was becoming increasingly common for men-of-war — especially those deployed to Caribbean locales — to be forced out of service due to timber rot (caused by the wood-eating teredo worm) or massive barnacle accumulation under the ship's keel. As early as 1758, experiments with copper sheathing of the hull below the waterline were attempted. However, it was not until the years of the American War of Independence that copper sheathing became a common practice in the Royal Navy (in fact, *Serapis* was one of the Navy's first copper-sheathed frigates; *Richard* was not so protected). The copper coating prevented the teredo worm from eating away at the hull and also slowed barnacle accumulation with its resultant sluggish effect on ship movement. The success of this science gave warships longer service-lives — at Trafalgar, *HMS Victory* was almost 30 years old.

## Speed and Sail

The force that principally propels a sailing ship through the water is the *wind*. The device that principally controls the direction of ship movement through the water is the *rudder*. However, the work of the wind on the sails is the most important consideration in comprehending the principals of maneuver with a sailing man-of-war.

No sailing ship could sail directly into the eye of the wind. In fact, it was impossible for such a ship to sail with its bow pointing at an angle of as much as 55° to the direction of the wind without being "taken aback" or losing all momentum. (Actually, fore-and-aft rigged cutters and schooners could successfully sail at about 3½ or more *compass points* — see module on the naval compass — or about 40°, with the direction of the wind.) A square-rigged frigate or ship-of-the-line could only manage to sail at over 5 compass points — or 55° — with the direction of the wind. Thus, a ship's forward momentum could only be controlled by the captain and crew with the wind coming from a direction that was not directly (or nearly directly) ahead of their vessel.



Depending on a ship's bow orientation in relation to the direction of the wind, the vessel would sail at varying speeds. If the wind was blowing against a ship from ahead (but not so directly ahead as to take the ship aback), she was said to be *beating* or *close-hauled*. This was usually the slowest point of sailing for men-of-war. If the wind was striking the ship at an angle that was roughly perpendicular to the axis of its hull, she was said to be *reaching* (or more specifically, *beam reaching*). This was a faster position of sailing than beating, but it was usually not the ship's fastest point of sailing. If the wind struck a vessel from behind (but not directly astern), she was said to be *quartering* or *broad reaching*. This was usually the fastest point of sailing for men-of-war because all unfurled sails would be exposed to the wind without blockage from other canvas. If the wind was coming from directly or near-directly astern, the ship was considered to be *running*. Running was a fast



point of sailing, but not the fastest because the mizzenmast sails tended to block the wind from striking the main and foremast sheets.

It must be stressed that no two ships were identical in their most advantageous or disadvantageous points of sailing. Due to subtleties of individual designs, some ships raced through the water when running but were rather sluggish when broad reaching. Fore-and-aft rigged vessels were fastest when beam reaching (and some were fastest when close-hauled).

The captain of a ship controlled the amount of sail he wished to unfurl to the wind, for varying amounts of canvas had considerable effect on a ship's performance. When sailing with little danger of impending battle, a captain would order *full sail* — hoping to get the maximum speed out of his vessel. Basically, under full sail every yardarm and spar would have the maximum amount of canvas unfurled on it that it could carry. However, because of the resultant tremendous pull on the sails exerted by the wind, the ship would become somewhat unmaneuverable. (It is interesting to note that at the Battle of Trafalgar, *HMS Victory* and the rest of Admiral Horatio Nelson's fleet sailed into battle under full sail — reaching for maximum speed but sacrificing maneuverability and thereby making each vessel highly vulnerable to enemy fire).

*Plain sail* was similar to full sail, except the top-most sails on each mast (i.e., topgallants and royals) were not unfurled. Obviously, plain sail was not intended for optimum speed, but the ship retained far more maneuverability than under full sail. With the danger of impending combat, *fighting sail* was usually implemented. Fighting sail employed a minimum of canvas (usually just top-sails), but permitted a very responsive rudder and speeds slow enough to allow the vessel to effectively maneuver for advantageous positions in battle. A ship under fighting sail was also less vulnerable to enemy fire than when it was under plain or full sail.

During the Age of Fighting Sail, the concept of ship *momentum* was vitally important. When sailing on the high seas, it was impossible for a ship to implement some sort of "brake" to halt its headway. The huge bulk of a man-of-war was almost impossible to stop once it gained considerable momentum. However, there were a number of techniques that were employed by captains to control their vessels' forward progress when being blown ahead by the wind. The most common method was known as *backing sail*. If a ship was sailing close-hauled or beam reaching, upon the command of "back sail!" the yardarms would be swung so that the wind would blow directly against the front of the sheets. They would then begin to flutter and press back against the momentum of the ship, slowing her down and eventually bringing her to a halt. Backing sail could be performed selectively (only for the mizzen topsails, for example) or completely, depending on the degree to which it was wished to slow the ship's headway. *Heaving to* was an extension of backing sail, in which the ship backed its sails and was then allowed to drift slightly with the wind so that its momentum halted and it ended up facing precisely at a right angle to the direction of the wind.

Of course, it was also possible for a ship to lose momentum by sailing directly into the wind intentionally and, as a result, be *taken aback* (also known as *in irons*). By performing such a maneuver, a vessel would eventually start making *sternway* (drifting backwards), but there was always the danger of suffering damage to the ship's spars and rigging under such circumstances — sometimes to the degree of losing a mast.

When sailing, ships were constantly under the effect of a type of drift known as *leeway*. Leeway meant that, regardless of the direction of movement a ship was following, it was also simultaneously drifting downwind. The closer a vessel sailed into the wind, the more noticeable this drift became. As usual, some ships suffered badly from leeway and others not at all. If a man-of-war had a hull that was not very susceptible to leeway, she was known as *weatherly*.

## Maneuver

The principal means of controlling the direction of a ship's momentum through the water is the rudder. On a man-of-war, the rudder was operated from the *wheel*, situated on the quarter-deck near the vessel's stern. The wheel controlled the *helm* (or *tiller*) which was directly connected to the rudder below decks in the very stern of the vessel. Spinning the wheel to starboard (right) caused the helm to swing to port (left — also known as larboard during this era), in turn swinging the rudder to starboard. Spinning the wheel to port caused the helm to swing to starboard, in turn swinging the rudder to port. Operating the wheel usually required two men in small men-of-war and at least four in big ships-of-the-line.

When a ship captain wished his vessel to proceed in a relatively straight direction, he ordered the helm to be kept *steady*. A steady helm kept the rudder perfectly in line with the keel of the vessel. As a result, the water rushing by the sides of the ship as it sailed was not obstructed in any way. The ship's orientation was thus not affected.

If a captain wished to change the orientation of his ship to starboard, he would order the wheel put over a certain number of compass points in this direction. As the quartermaster spun the wheel over, the helm would swing to port and, as a result, the rudder would swing to starboard. The water running past the ship as it sailed would strike the rudder in this new position, forcing the ship's stern off to port. As a result, the ship's bow swung in a starboard direction. When the desired course was obtained, the helm would be straightened, swinging the rudder back into line with the ship's keel. Of course, altering a man-of-war's direction to port was simply the reverse of the above procedure.

Ship maneuver could also be subtly affected by the position of unfurled sails in a square-rigged man-of-war. If a vessel was sailing with the wind coming from its port or starboard side, her orientation would not be affected, assuming all three masts had an equal amount of canvas unfurled to the wind. However, if only the foremast had sheets unfurled, the wind would begin to influence only the *bow* of the ship, swinging it to port if the wind was coming from a starboard direction or swinging it to starboard if the wind was coming from a port direction.

Likewise, if only the mizzenmast had sheets unfurled, only the ship's *stern* would be affected by the wind — swinging it to port (and thus changing the direction of ship movement to starboard) if the wind was coming from starboard and swinging it to starboard if the wind was coming from port. A man-of-war's direction was not affected if only the mainmast (or all the masts) had unfurled sails.

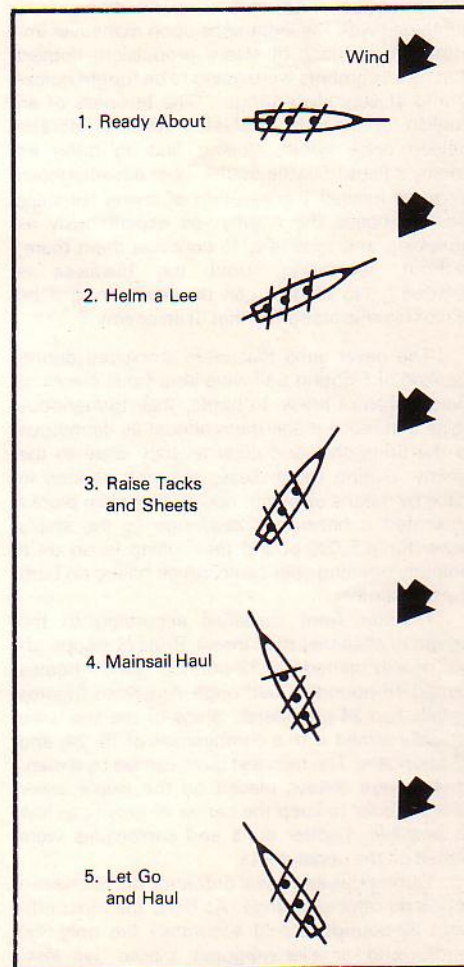
The terminology employed when handling men-of-war during the Age of Fighting Sail was complex. When the wind was coming from the starboard side of a vessel, she was said to be sailing on the *starboard tack*. When the wind was coming from the port side, she was said to be on the *port tack*. The side of the ship that the wind was striking when sailing was known as the *weather* side (and this direction was also known as *to windward*). The opposite side of the ship was known as the *lee* side (and this direction was also

known as *leeward*). If a ship turned her bow in the direction of the wind, this maneuver was known as *luffing*. If she turned away from the wind, this was known as *bearing away*. *Tacking* was a turning maneuver that was intended to change the course of a vessel from one tack to another (i.e., from sailing on the port tack to sailing on the starboard tack) by turning the bow of the ship into and past the wind. *Wearing* the ship was intended to do the same thing as tacking, except by turning the bow of the ship *away* from the wind.

Tacking was the most complex and dangerous maneuver that would be carried out by a man-of-war on the high seas. Performing it required a well-trained and highly disciplined crew and a captain with an experienced sense of sailing and timing. During tacking, there was always danger of being badly taken aback by the wind — even to the degree of losing a mast. In addition, it required the participation of virtually the entire crew, much to the detriment of a ship's firepower during battle. However, tacking was considered preferable to wearing as a turning maneuver because the vessel turned in a tighter circle and it took less time to perform.

Tacking was performed according to the following series of commands:

1. "**Ready About**": All men were sent to their stations: some aloft, some at the wheel, and most to man the various braces connecting to yardarms that would have to be swung about during the tacking maneuver at just the proper moment.
2. "**Helm-a-Lee**": The wheel was spun over as hard as possible in a windward direction, swinging the helm to leeward as a result. The rudder assumed a hard angle to windward, turning the bow of the ship in this direction. At this time, the quartermaster reported "Helm's hard-a-lee!"





**3. "Raise Tacks and Sheets":** This was ordered by the captain as the ship turned towards the wind but was not quite facing directly into it yet. Tension on the sails was partially released so that the canvas was simply blown about by the wind rather than catching it.

**4. "Mainsail Haul":** This was the critical moment in tacking. Just as the ship's bow was about to point directly into the wind, most seamen tugged, furiously at the main and mizzenmast braces, quickly swinging their yardarms in approximately a 90° arc. If this was performed at just the right time, these sails would catch the wind just after the ship's bow had swung through the eye of the wind. If the yardarms were turned too late (or not at all), the full force of the wind would blow directly against these sails, taking the ship aback and forcing her to make sternway.

**5. "Let Go and Haul":** As the ship started to make headway in her new direction, the foremast yardarms were swung about in the same manner as the main and mizzenmast yards. All unfurled sails should now have been catching the wind successfully. The ship could then begin to sail in her new orientation normally. The whole procedure could take up to ten minutes, although constant attention from those performing the maneuver was required.

Since the direction the wind was blowing was such a vital factor in naval strategy and tactics during the Age of Fighting Sail, it is important to note that *the direction from which the wind was coming* and *not* the direction it was blowing towards determined its classification. For example, if the wind was blowing directly south, it would be classified as a *northerly* wind.

## Naval Weapons and Tactics

Sea fighting tactics during the Age of Fighting Sail were highly complex. The very nature of the ships and weapons themselves, combined with the limitations upon maneuver imposed by the lack of steam propulsion, implied that naval combats were going to be fought quickly and at very close range. "The business of an English commander-in-chief," Admiral Horatio Nelson once wrote, "being first to bring an enemy's fleet to battle on the most advantageous terms to himself (I mean that of laying his ships close onboard the enemy, as expeditiously as possible), and secondly, to continue them there, without separating, until the business is decided... No captain can do very wrong if he places his ship alongside that of an enemy."

The naval guns that were employed during the Age of Fighting Sail were enormous pieces of molded iron or brass. In battle, their tremendous noise and recoil made them almost as dangerous to the firing ship and crew as they were to the enemy. During rough seas, securing cannon in place by means of hemp rope and wooden blocks presented a hazardous challenge to the ship's crew, for a 5,000-pound gun rolling loose on a violently pitching ship could wreak havoc on both man and timber.

Cannon were classified according to the weight of shell that they threw. Brigs or sloops-of-war usually carried 6 or 12-pounder guns. Frigates carried 18-pounders (although American frigates usually had 24-pounders). Ships-of-the-line were typically armed with a combination of 18, 24, and 32-pounders. The heaviest guns carried by a man-of-war were always placed on the ship's lower deck in order to keep the center of gravity as low as possible. Lighter guns and carronades were placed on the upper decks.

During this era, naval ordnance did not have a very long effective range. At best, the most efficient 32-pounder could accurately fire only 350 yards, and smaller-weighted pieces far less.

However, the maximum range of these guns was far greater — perhaps one and a half miles for large cannon firing at 10° elevation, although there was very little chance of hitting an intended target at such extreme range.

In 1779, a major development in gunnery took place which was to have a considerable influence on ship armament during the Napoleonic Wars and the War of 1812. This was the invention of the *carronade*. The carronade was a relatively light weapon with a very short barrel. This barrel was, however, unusually wide, enabling the gun to fire a ball that weighed as much as 68 pounds. Because of their light weight, carronades could be placed on the upper decks without fear of raising the ship's center of gravity. Because they were more manageable than "long" guns, they could be crewed by as few as four men (14 men were required for a normal 32-pounder). As a result of these advantages, it was usual for a warship to go to sea after 1800 with a variety of ordnance onboard. This typically included carronades on the upper deck and long guns on the lower decks. *USS Constitution* carried 22 carronades (almost one-half her cannon) in 1812. Some sloops-of-war and brigs (like *USS Wasp*) were armed almost completely with carronades, although ships-of-the-line usually carried only two or four.

The primary disadvantage of the carronade was its very short effective range. Basically, it could not hit a target at more than 200 yards range. However, like long guns, the carronade's maximum range was far greater.

Loading and firing a naval gun was a complex and laborious procedure. First, the gun had to be pulled back on its tackles so that it did not project through its gunport. In this position, a crewman could approach the muzzle without having to lean over or outside the vessel. Gunpowder cased in flannel bags was then shoved all the way down the bore with a long ladle-like device, followed by the actual cannon ball, which was then pushed home with a rammer-spike (when engaging the enemy at close range, two balls — or often three — would sometimes be loaded together). A cloth was partially wrapped around this ball as it was rammed home to keep it from rolling loose in the muzzle as the gun was elevated or depressed. Next, the gun captain thrust his *priming-iron* (a metal needle) down the *touch-hole* (a small vent at the back of the gun), piercing the flannel cartridge bag that had already been inserted into the gun's bore. Following the priming-iron's withdrawal, the gun-captain inserted a *priming-tube* (a thin device resembling a drinking straw, filled with a small amount of gunpowder) through the touch-hole and into the cartridge bag.

The gun was now ready to be fired. It was run out of its gunport by hauling on its ropes and then aimed appropriately by the gun captain and crew with handspikes. Finally, the gun captain picked up a long, forked staff (known as the *linstock*), around which was wound a slow-burning wick. (Before battle, many of these wicks would be lit and placed in *match-tubs* — a few of which were placed on each deck so that they were readily available to gun crews during action.) In order to fire the gun, the spark of the wick was touched to the top of the priming-tube protruding from the touch-hole and quickly drawn back (a linstock that was not rapidly withdrawn upon firing would be blown out of the gun captain's hand as the priming-tube's powder exploded). The spark set off the priming-tube's gunpowder, which in turn set off the far larger amount of powder in the cartridge bag. A violent explosion occurred and the ball was forced out of the bore as a result.

As a gun fired, it recoiled straight or diagonally backwards with great force. This was the most dangerous moment in gun handling for the crew.

Particularly on a violently rolling ship, it was impossible to foretell the direction and force with which a gun would recoil, and anyone who got in its way would be instantly incapacitated if not killed. The gun's recoil was partially restrained by its breeching tackle, but it was not unknown for this hemp-rope to snap under the vigorous pressure when the cannon flew back uncontrollably.

Before reloading and firing the gun again, it was necessary to clean out the piece in order to prevent any remaining sparks or embers in the bore from setting off a newly-inserted cartridge bag. First, a *worm* (a large corkscrew on the end of a long stick) was inserted all the way down the muzzle and withdrawn — removing any burning bits of material that might have remained in the bore after firing. Then, a moistened sponge on the end of a long stick was inserted in an identical manner, extinguishing any lingering sparks in the bore. The gun was now ready for new priming and firing.

Naval guns, especially old models, were notoriously unreliable. Misfires (in which the linstock's spark was applied to the priming-tube, but no explosion occurred) were common. In fact, it was not an unknown occurrence for a gun to completely blow up upon firing, wreaking terrible devastation to the ship and its crew. In its engagement with *Serapis*, two 18-pounder cannon onboard *Bonhomme Richard* exploded when they were fired during the American ship's second broadside, killing and wounding 15 men and demolishing the deck overhead and its supporting timbers. John Paul Jones immediately ordered that all remaining 18-pounders onboard *Richard* were to be abandoned, distributing their crews around the ship to his 12-pounder guns.

After 1800, most naval cannon were altered to be fired with *flintlocks* instead of linstocks. When triggered by a pull from a lanyard, a flint fell sharply onto the touch-hole, throwing up a series of sparks that ignited the priming-tube just as the linstock's wick had done upon application by the gun-captain. A flintlock was a quicker, safer, and more certain means of firing a naval gun than the older method. Nonetheless, ship captains throughout the Napoleonic Wars invariably kept wicks alight in match-tubs during battle, just in case their flintlocks failed to operate properly — as they were wont to do in humid, misty, or rainy weather.

## Combat

Aiming and firing cannon from a rolling or pitching ship was a tricky business. Officers generally preferred to fire their guns as their ship was rising from a pitch or roll so that the ball, if aimed slightly inaccurately, might strike the target's spars or rigging and not fall harmlessly into the sea. This was the common French practice, although some British officers did not believe in it and practiced the opposite method.

It was also a common French practice to open fire on the enemy at long range, aiming high for the purpose of dismasting their opponents or slowing them down considerably due to rigging damage. A number of special types of projectiles were employed for this purpose, such as "bar" or "chain" shot. These weapons were intended to rip sheets and rigging rather than pierce the target's hull or incapacitate crew members. This tactic of opening fire at long range was the fulfillment of French naval strategy, which dictated that general ship-to-ship and fleet actions were to be avoided, while the *guerre de course*, or commerce raiding, was to be stressed. Hindering an opponent's sailing capabilities by firing at his rigging enabled a French captain to dictate whether it was feasible to continue the action to a successful conclusion or to flee in the face of adverse odds. Should a battle develop at close range, French gunners would

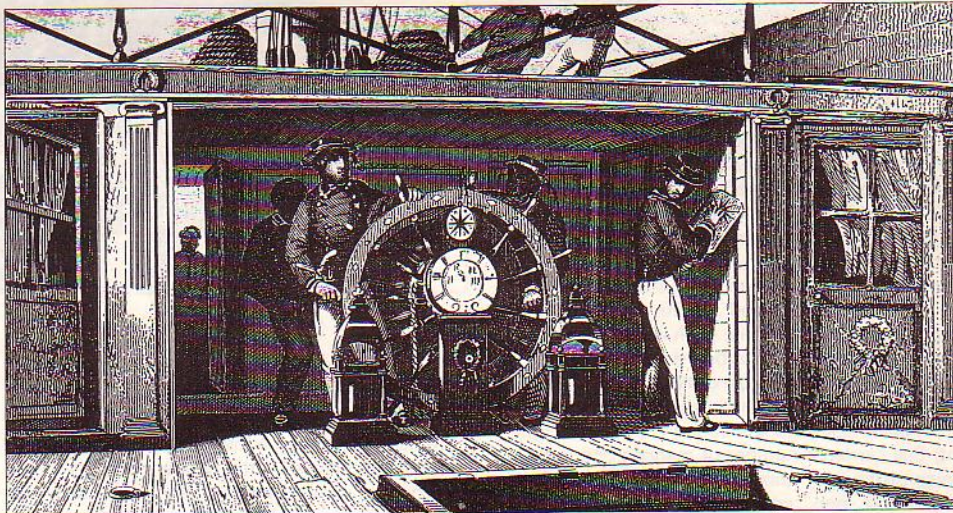


of course begin to concentrate their fire on the target's more vulnerable hull.

British and American gunners tended to hold their fire until virtual point-blank range. When broadsides commenced, they were invariably targeted at the enemy's hull. The primary advantage of holding fire until the last moment was that guns could be double and triple-shotted prior to the action. These multi-shotted guns could only fire 50 or 100 yards, but their effects were devastating to the enemy's hull and tightly-packed crew. Shot that was designed specifically for anti-personnel employment, such as grape or canister, could be used in this role. At Trafalgar, it was said that *HMS Victory's* initial broadside, delivered at five to ten yards range against the stern of the French ship-of-the-line *Bucentaure*, disabled more than 300 French sailors and put virtually an entire gun deck out of action. Of course, by holding her fire until the last moment, *Victory* had to run the gauntlet of French and Spanish fire from more than ten ships-of-the-line for about 30 minutes, suffering terribly as a result.

Due to the nature of warship design and armament during the Age of Fighting Sail, a man-of-war's offensive power was almost totally bound by extremely limited fields of fire to its port and starboard sides. Aside from a very few bow and stern "chase" guns, which could fire directly ahead or astern of the vessel, a ship's entire armament was aligned exactly perpendicular to its hull. Thus, because a vessel's bow and stern areas were highly vulnerable to enemy fire, the tactic of *raking* or "crossing the T" was every captain's furtive desire in battle. Not only was a ship that was being raked totally incapable of replying, but the enemy's shot were flying down the *length* of the target ship — devastating everything in their path instead of piercing one side of the ship and, most likely, passing out the other. In the engagement between *USS Constitution* and *HMS Guerriere* on 19 August 1812, the American vessel badly raked her British opponent twice at close range, which was just about enough to settle the action in favor of "Old Ironsides."

Regardless of the destructive power of naval ordnance, most engagements during the Age of Fighting Sail were still decided by the age-old tactic of "laying the enemy on board." *Fouling* (grappling) a ship with that of the enemy was truly a decisive tactic; it was virtually certain that within a very short period of time, one side or the other would gain complete control of the enemy's ship. However, despite boarding's conclusive nature, it is certain that it was not a tactic that was looked upon with relish by ship captains because of its terrible cost in lives. In a 14-minute battle on 1 June 1813 that was highlighted by a furious



5-minute melee at close quarters, *USS Chesapeake* lost 39% of her crew of 379 sailors as casualties. The victor of the engagement, *HMS Shannon*, lost over 25% of her crew of 330 men. Compare this with the action of 20 February 1815 between *USS Constitution* and *HMS Cyane* and *HMS Levant* — a battle that culminated with a long-range gunnery duel between the antagonists. The American ship suffered a loss rate of about 3% in taking both British ships as prizes — yet the engagement lasted three times as long as the action between *Shannon* and *Chesapeake*!

Obtaining or refusing the *weather-gauge* was another important consideration of naval tactics during this era. If a captain possessed the weather-gauge in battle, it meant that his ship or fleet was to *windward* of the ship or fleet that he was about to engage. His approach to battle could be made with the wind at his back, whereas the enemy could only converge by beating upwind. Possessing the weather-gauge made it easier to choose the moment (if any) of close action with the enemy and gave the owner a slight advantage in the power of initiative in terms of maneuver. However, the ship that refused the weather-gauge had the additional ability to flee from the impending battle at will.

Tactically, the holder of the weather-gauge was sometimes at a severe disadvantage in a strong wind because his ship would heel over towards her lee side. As a result, the ocean would envelop the ship's lower gunports and prevent the guns on this deck from being fired through them.

## Ship's Company

A man-of-war was a very compact fighting machine. As a result, living quarters for the crew — even the officers — were anything but spacious. Nevertheless, the number of sailors carried onboard warships was not nearly sufficient to carry out more than one or two basic tasks simultaneously.

A first-rate man-of-war usually maintained a crew of over 800 men, of which about 15 were officers and warrant officers (with 75 petty officers). For smaller rates, crews were of the following strengths: second-rates possessed about 700 men; third-rates, 600; fourth-rates, 350; fifth-rates, 300; and sixth-rates, 200 or less.

## The Officers

Of course, the ultimate source of power and discipline onboard a warship was the captain. (Sixth-rates and smaller vessels were invariably commanded by officers holding the rank of *Master and Commander* in the American and Royal Navies — shortened to *Commander* after the American War of Independence — although they were traditionally referred to as the ship's "captain," regardless of rank.) *Senior Post-Captains* (those with over three years seniority in captain rank) usually commanded first, second, third, or fourth-rates. *Junior Post-Captains* typically led fifth-rates.

The captain was ultimately responsible for the efficient operation of his ship, both in terms of the physical maintenance of the vessel itself as well as the productive behavior of the crew. He was obligated to keep the ship fully manned, which, during wartime in the huge Royal Navy, was an arduous task and often relied on the infamous "press-gang" in seaside towns and villages. Beyond these roles, a plethora of minute details of shipboard life were formally required of him by his superiors on shore (in the Royal Navy, 48 specific duties were listed in the written instructions of the Admiralty for all ship captains).

The most important duties a ship captain was responsible for were sailing and gunnery training and crew discipline. A well-trained crew could tack on a moment's notice without fear of being taken "in irons" — even when short-handed. It could fire the ship's weapons faster and more accurately than a "landlubber" collection of sailors. However, superb crews were often a function of harsh discipline; the captain could order the crack of the "cat-o'-nine-tails" at will, even for petty offenses such as a lackadaisical salute or spitting on the deck. Perhaps the best crews were found on ships with extremely stern — although not tyrannical — captains.





Directly subordinate to the captain were the ship's lieutenants, of which there were as many as eight and as few as five in a ship-of-the-line (frigates usually had three). Lieutenants were ranked by seniority, the "first" lieutenant being the ship's second-in-command and closest associate with the captain. Lieutenants each stood to a *watch* at different times of the day, for which they were expected to log all activities (including hourly ship speed) in the ship-log as well as to insure the proper course the vessel was heading. Like the captain, each lieutenant was also responsible for a myriad of disciplinary and maintenance details, all of which were reported directly to their commanding officer. In battle, each lieutenant usually commanded a port or starboard side gun deck. He was responsible for keeping all guns secured and in action as well as preventing accidents.

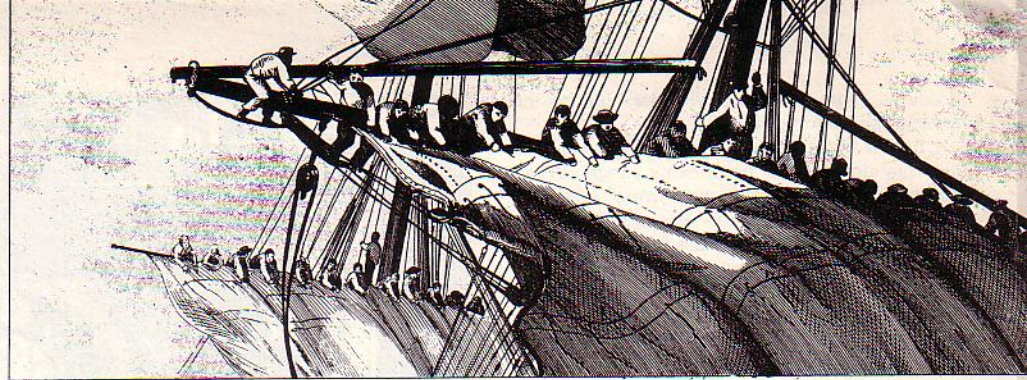
Almost all warships during the Age of Fighting Sail carried a number of marines onboard. In ships-of-the-line, this complement was usually about 150 men, commanded by a captain; in frigates, the number was approximately 50, commanded by a lieutenant. In effect, marines were the policemen of the vessel and were responsible for guarding officers' quarters and vital ship storerooms. In battle, marines fought with muskets and hand grenades (although they were occasionally called upon to carry powder for gun crews). They were usually stationed on the upper deck or in the "fighting top" platforms on each mast.

A unique category of sailor was the *midshipman*. Midshipmen were basically officer-cadets (sometimes only 12 years old) that were brought onboard for duty at the captain's fancy. However, their training was purely functional; they attended no sailing schools or academies and learned the methods of seafaring totally by actual experience. Temporary (non-commissioned) lieutenant rank could be reached by the age of 19 or 20, although a permanent commission required a written naval exam. Midshipmen were not officers, although they received some amenities usually associated only with those holding commissions. (However, it is interesting to note that midshipmen could be legally flogged or beaten.) Ships-of-the-line carried about 20 midshipmen on their rosters; frigates had only approximately six.

Ranking below the ship's officers were the *warrant officers*, so called because they possessed their monarch's or government's "warrant of authorization" for their particular duty. Warrant officers were usually particularly intelligent and loyal seamen who had risen in prominence among the members of the crew over a long period of years. The most important warrant officer onboard a warship was the *master*, who was considered so vital to ship functions that he wore a uniform almost identical to his captain's. The master was usually an expert navigator and sailor and was responsible for numerous petty details of shipboard life. He was also the primary instructor in seamanship to the aspiring midshipmen.

Another important warrant officer was the *gunner*, who was liable to answer for the efficient performance of the ship's guns and ammunition. The *master-at-arms* was the "police-chief" of the crew, who was obligated to maintain ship discipline according to instructions from the first lieutenant.

The *boatswain* was another important warrant officer who was responsible for the physical soundness and durability of the ship. He inspected all shipboard structures from dawn to dusk every day, and reported directly to the captain should some item be amiss. The symbol of his rank was his whistle, which was always carried around his neck and was used (or those of his mates) to pipe various officers and visiting dignitaries onboard. The *purser* was a warrant officer who kept track of



the ship's supplies, particularly water and food. He was also responsible for issuing these items to the crew, a task which he invariably performed with great fastidiousness. Other warrant officers maintained on a man-of-war's muster rolls were the *chaplain*, the *surgeon*, and the *carpenter*, whose functions were self-explanatory.

Next in seniority to the warrant officers were the *petty officers*, whose duties, as their names implied, were far more specific than those of their superiors. Petty officers were also seamen who had risen from the ranks, although they were usually not as old and wizened as the warrant officers (most warrant officers had to spend a number of years as a petty officer before achieving their more exalted rank). Petty officers included the *quartermaster*, who was responsible for the efficient operation of the helm; the *coxswain*, who was in charge of the captain's barge when rowing from ship-to-shore or vice versa; the *steward*, who was the captain's personal servant; the *sailmaker*, and the *cook*. All in all, there could be as many as 80 petty officers onboard a first-rate man-of-war.

## The Crew

The low men on the totem pole in a warship's social hierarchy were, of course, the seamen. Seamen were chosen to serve their tours of duty onboard warships through a variety of methods — both voluntary and involuntary. In the United States and Royal Navies, once a seaman was transferred onboard, he was classified into one of three broad categories which determined his eventual functions and pay.

The most prestigious classification for a sailor was that of *able seaman*, which indicated that the sailor in question was physically fit and alert and capable of performing rigorous activity. Particularly nimble and small able seamen were chosen as *topmen*. Topmen were called upon to man the yardarms and to furl and unfurl sails as the situation demanded — a highly dangerous and terrifying task, even in sedate weather.

The second classification was that of *ordinary seaman* — sailors whose physical and mental deficiencies limited their roles to less arduous tasks (and less pay), such as manning the braces or operating the guns. The lowest pit for a sailor to fall into was classification as a *landsman* (sometimes called *waister* or *idler*). These men were considered suitable for only simple and unexciting duties, such as cleaning or manning the pumps. They were thought to be so lacking in alertness that they were not even allowed to participate in any of the seven watches of each day at sea. Instead, they spent most of their time onboard below decks.

In a ship-of-the-line, there would be about 150 sailors in each of these three classifications onboard. In addition, boys of extremely young ages (perhaps 15 or younger) were categorized separately. There were usually 40 of these boysailors onboard a first-rate. They usually functioned as "powder-monkeys" in battle, carrying car-

tridge bags filled with gunpowder from storerooms below decks to specific cannons on the gun decks.

Daily activity onboard a man-of-war was performed according to a series of seven separate *watches*, during which a certain assigned percentage of the crew was expected to be alert and on the upper deck, ready to perform any duty called for. These duties included swabbing, keeping look-outs, and painting. The *middle watch* lasted from midnight to 4 AM; the *morning watch* lasted from 4 AM to 8 AM; the *forenoon watch* from 8 AM to noon; the *afternoon watch* from noon to 4 PM; the *first dog watch* from 4 PM to 6 PM; the *second dog watch* from 6 PM to 8 PM; and, finally, the *first watch*, from 8 PM to midnight. Sailors usually served a routine of one watch on duty followed by another off, although of course any off-duty seaman could be (and often was) interrupted from a peaceful nap in order to perform various tasks — most specifically, ship maneuver and sailing or weapon training.

Of course, in battle, each man was expected to be at his *action station*. In these positions, most seamen were part of gun crews. Huge 32-pounder cannons required 14 men apiece to operate efficiently (24-pounders needed 12 men and 18-pounders required 10). Each gun team was responsible for the operation of two guns during an engagement — one on the starboard side of the vessel and the opposite gun on the port side. Because of the difficulties of operating a gun with a short-handed crew, it was extremely difficult and rare for both the starboard and the port broadsides to be operated simultaneously. Two lieutenants supervised the operation of the guns on each deck.

During battle, the captain and his retinue (including the first lieutenant, the clerk, and the master) remained on the quarterdeck, near the ship's wheel. Directly behind them, on the poop, was a complement of marines with hand grenades and muskets. In the bow of the ship stood the boatswain and a few of his mates, plus a few seamen to operate the forecastle guns. Below the waterline, the surgeon performed his grisly duties with his mates in the cockpit. Nearby, in various storerooms and the magazine, approximately 30 seamen worked, dispensing ammunition to the powder-monkeys. Finally, about 30 topmen operated aloft on the fore, main, and mizzen-masts, sometimes aided by marines. These men would either fight with small arms from the mast's "fighting top" or perform simple evolutions with the rigging and the sails. However, the large number of men that were required to man the ship's guns made intricate maneuver, such as wearing or tacking, extremely difficult to undertake during battle. Of course, a well-trained crew could leap from gunnery to maneuver tasks and vice versa, but any attempt to execute tactical movements of any complexity simultaneously with heavy and prolonged gunfire was completely out of the question. □ □



## THE AGE OF FIGHTING SAIL A CHRONOLOGY, 1775-1815

**30 October 1775:** The United States (actually "Continental") Navy is born by authorization of the Continental Congress at Philadelphia.

**24 April 1778:** Captain John Paul Jones in *USS Ranger* (18) engages *HMS Drake* (20) in a one-hour battle and captures her. The battle is the successful culmination of a two-month raid by the American captain in the Irish Sea.

**23 September 1779:** Jones' *Bonhomme Richard* (40) captures *HMS Serapis* (50) in one of the most renowned naval engagements in military history.

**16 January 1780:** Admiral George Rodney's British fleet of 22 ships-of-the-line defeats the Spanish Admiral Langara's squadron of 11 men-of-war off the coast of Spain in what became known as the "Moonlight Battle."

**16 March 1781:** The French Rhode Island squadron under the command of Commodore Destouches engages the British New York squadron to a draw in the Battle of the Chesapeake Capes. Eight ships-of-the-line are involved on each side.

**5 September 1781:** The 24-ship French fleet under the command of Admiral Francois J.P. de Grasse meets the 19-ship British fleet of Admiral Thomas Graves in the Battle of the Virginia Capes at the mouth of Chesapeake Bay. A battle of intricate maneuver is fought in restricted waters, with neither side emerging victorious. However, the French fleet retains possession of the Chesapeake, enabling General George Washington's Franco-American army to successfully terminate its month-long siege of Yorktown, Virginia — leading to the capitulation of General Cornwallis' army.

**17 February 1782:** French Admiral Pierre Andre de Suffren fights the first of five violent naval engagements in the Indian Ocean against a British squadron under the command of Admiral Sir Edward Hughes. Although neither side gains tactical predominance over the other, Suffren's operations in this remote area of the world prove to be a thorn in the side of British strategy in India, severely disrupting commerce and land operations on the sub-continent.

**12 April 1782:** Admiral Rodney's 34-ship fleet decisively defeats de Grasse's 29 ships-of-the-line in the Battle of the Saintes in the Caribbean Sea. By abandoning the conservative "line-ahead" approach to naval battle, Admiral Rodney establishes a new, more free-wheeling method of handling fleets and individual ships in battle.

**29 May-1 June 1794:** The battle of the Glorious First of June is fought west of Brittany between the British fleet of Admiral Lord Richard Howe (26 ships-of-the-line) and the French fleet of Admiral Louis Villaret de Joyeuse. Again, the battle develops into an unconventional melee in which seven French men-of-war are taken as prizes with no substantial British loss.

**14 February 1797:** The greatly-outnumbered squadron of Admiral Sir John Jervis (15 sail-of-the-line) decisively defeats a huge Spanish fleet in the Battle of Cape St. Vincent. Admiral Jose de Cordova's 27 ships were to have been united with the French Brest fleet for a planned

invasion of Great Britain. However, subtle tactical maneuvering by the British, led by Captain Horatio Nelson in *HMS Captain*, foils this scheme.

**16 April 1797:** The British fleet, at anchor at Spithead (off Portsmouth), is prevented from sailing by a widespread mutiny among the fleet's crews. The mutiny lasts for one month, ending only when a number of key demands are met by the British Admiralty. However, 29 mutineers are eventually hanged.

**11 October 1797:** Admiral Adam Duncan, with 16 British ships-of-the-line, decimates a Dutch squadron of 15 men-of-war under the command of Admiral Jan William de Winter at the Battle of Camperdown.

**1 August 1798:** In an unusual battle in sheltered and restricted waters, the French Egyptian squadron of 13 vessels under the command of Admiral Francois Brueys is completely surprised and almost totally annihilated by Admiral Nelson's fleet of equal strength. This engagement, one of the most decisive victories in naval history, becomes known as the Battle of the Nile.



**20 November 1799:** *USS Constellation* (36) defeats the French frigate *Insurgente* (40) in the most famous naval action in the undeclared "quasi-war" between France and the United States. (*Constellation* survives today as a floating museum in Baltimore harbor.)

**2 April 1801:** In Copenhagen harbor, amid dangerous mud flats and restricted channels, Admiral Nelson boldly engages the Danish fleet and strong harbor defenses, culminating in a decisive British victory and the destruction of the Danish Navy.

**31 October 1803:** During operations against the "Barbary Pirates" in North African waters, *USS Philadelphia* (36) runs aground and surrenders to corsairs belonging to the Pasha of Tripoli.

**16 February 1804:** The refloated *Philadelphia* has been used by the pirates as a prize, but Lieutenant Stephen Decatur leads a daring expedition into Tripoli harbor and burns the frigate. This raid is labeled "the most daring act of the age," by Lord Nelson.

**30 March 1805:** Admiral Pierre Villeneuve's Toulon fleet of 11 ships-of-the-line escapes from harbor, eluding the watchful eyes of Nelson's Mediterranean squadron. Villeneuve unites with seven Spanish men-of-war at Cadiz and sails westward across the Atlantic,

reaching the Caribbean on 14 May. This voyage marks the beginning of the Trafalgar campaign.

**22 July 1805:** Villeneuve's fleet, returning to Europe, accidentally encounters the British Channel fleet under the command of Sir Robert Calder off the coast of France. The action ends in a narrow British victory, although the Franco-Spanish fleet escapes to Cadiz. Calder is eventually court-martialed for his supposed indecisive performance in this battle.

**21 October 1805:** Following a period of refurbishment at Cadiz, Villeneuve's fleet, now 33 ships strong, leaves Cadiz harbor in order to attempt a movement into the Mediterranean. However, watched closely by Nelson's 27 ships-of-the-line, the Franco-Spanish fleet is attacked by Nelson in light winds off Cape Trafalgar, Spain. The ensuing battle ends in decisive victory for the British, who take 18 ships of the enemy as prizes. Nelson's unique tactic of breaking the enemy line in two places simultaneously, followed by a wild melee, proves to be the Allies' downfall. However, the British Admiral is felled by a musket ball in the battle and is killed.

**6 February 1806:** Part of the French Brest squadron, being hunted since Trafalgar, is finally caught in battle in the Caribbean off Santo Domingo. In the ensuing battle, Admiral Sir John Duckworth's squadron almost annihilates the French force under Admiral Laissaque.

**22 June 1807:** *HMS Leopard* (50) fires upon *USS Chesapeake* (38) when attempting to board the American vessel to search for deserters from the Royal Navy. This incident creates extreme friction between the United States and Great Britain, eventually culminating in the War of 1812.

**22 February 1812:** *HMS Victorious* (74) captures the new French third-rate *Rivoli* (74) off Venice in a classic confrontation between two ships-of-the-line.

**19 August 1812:** *USS Constitution* (44) defeats *HMS Guerriere* (38) by subtle maneuver and raking in one of the most celebrated frigate duels of the War of 1812. (*Constitution* survives today in Boston harbor, still in commission in the United States Navy.)

**17 October 1812:** *USS Wasp* (18) captures *HMS Frolic* (18) in an unusual battle between two sloops-of-war armed almost entirely with carronades. Ironically, *Wasp* succumbed to *HMS Poitiers* (74) immediately after the capture of *Frolic*.

**25 October 1812:** *USS United States* (44) captures *HMS Macedonian* (38) in another in a series of decisive frigate actions that is becoming very alarming to the British Admiralty.

**29 December 1812:** *USS Constitution* defeats and sinks *HMS Java* (38) in a two-hour battle off Brazil, earning the American vessel the nickname "Old Ironsides."

**24 February 1813:** In a remarkably quick engagement, *USS Hornet* captures *HMS Peacock* (10) in the South Atlantic.

**1 June 1813:** Finally turning the tables on their American foes, *HMS Shannon* (38) captures *USS Chesapeake* (38) in a 15-minute engagement off Boston. Captain Lawrence's plea "Don't give up the ship!" becomes a rallying cry for the US Navy for the remainder of the war.



**10 August 1813:** An *ad hoc* American fleet on Lake Ontario under the command of Commodore I. Chauncey suffers a defeat at the hands of a similar British flotilla under Captain Sir James Lucas Yeo. However, the action proves to be strategically indecisive due to the timidity of both commanders.

**14 August 1813:** The American brig, *USS Argus* (10), has her remarkably successful commerce-raiding cruise brought to an end by *HMS Pelican* (9) in the English Channel.

**3 September 1813:** *USS Enterprise* (16) captures *HMS Boxer* (14) in a 30-minute battle. Both the American and the British captains are killed.

**10 September 1813:** Captain Oliver Hazard Perry's motley collection of American warships on Lake Erie captures Captain Robert Barclay's entire British squadron, despite a near-disastrous commencement of the battle by the Americans. As a result of this engagement, American control of Lake Erie was assured for the remainder of the war. Perry reported his victory to his superiors with the famous phrase, "We have met the enemy and they are ours!"

**27 March 1814:** The highly successful commerce-raiding cruise of *USS Essex* (32) is terminated in the Pacific off the coast of Chile by the combined efforts of *HMS Phoebe* (36) and *HMS Cherub* (18). *Essex's* very short-ranged 32-pounder carronades prove to be her Achilles heel in this long-range gun duel. On-board *Essex* is a young midshipman named David Glasgow Farragut.

**29 April 1814:** *USS Peacock* (22) captures *HMS Epervier* (18) in the Atlantic off Florida. *Epervier* enters service in the US Navy within a few months.

**28 June 1814:** *USS Wasp* (the second vessel to bear this name during the War of 1812; 22 guns) engages and defeats *HMS Reindeer* (20) in the English Channel. *Wasp* then commences a three-month long commerce-raiding mission, only to disappear at sea in October.

**11 September 1814:** A precipitously-constructed American squadron of 16 small warships under the command of Lieutenant Thomas Macdonough decisively defeats an almost identical British force under Captain George Downie on Lake Champlain. The threat of a British invasion of the New England states and southward down the Hudson valley is averted.

**15 January 1815:** *USS President* (44) is captured off New York by *HMS Endymion* (50) when attempting to run the British close-blockade.

**20 February 1815:** "Old Ironsides" captures two small British sloops-of-war off the coast of Portugal. These ships are *HMS Cyane* (34) and *HMS Levant* (21).

**23 March 1815:** *USS Hornet* (18) takes the British sloop-of-war *HMS Penguin* (18) as a prize in the South Atlantic, an action that is fought more than three months after the signing of the Treaty of Ghent, officially ending the War of 1812.

**15 July 1815:** Almost one month after the Battle of Waterloo, Napoleon Bonaparte boards *HMS Bellerophon* in surrender, soon to be transported to the island of St. Helena. Here, he will spend the rest of his life in exile. □ □

## THE NAVAL COMPASS

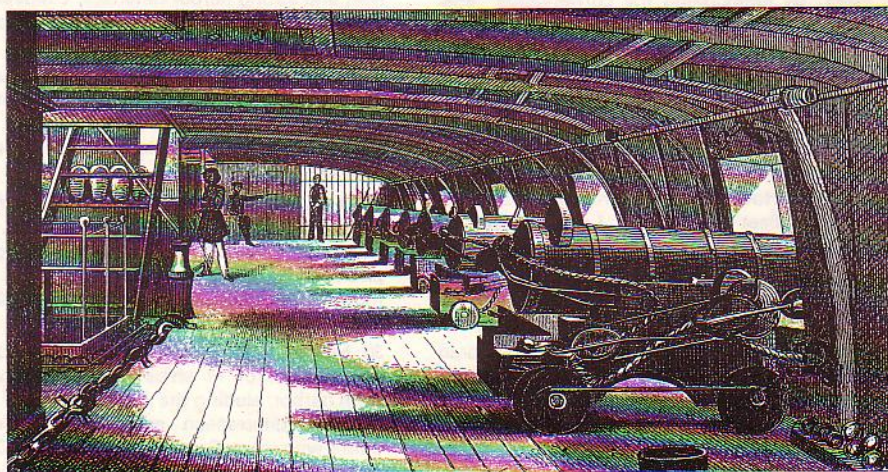
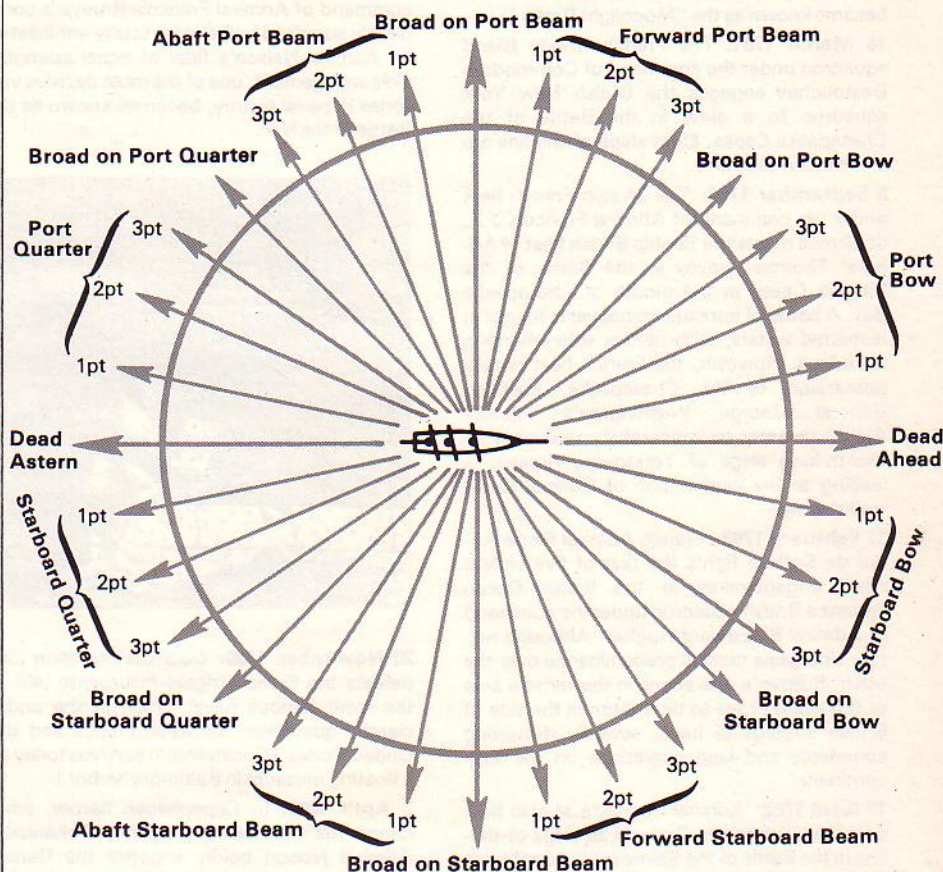
During the Age of Fighting Sail, the modern 360° naval compass was *not* used as a means of maritime navigation. Instead, ship heading was expressed in terms of prime direction (i.e., north-northwest or east-southeast) and *compass points*, of which there were 32 in a complete circle (each point being the equivalent of 11¼° according to the modern 360° method of expression).

For example, a ship captain might order his ship sailed in a northerly direction. The direction of the wind would be expressed in a number of compass points relative to the heading of this vessel. Thus, if the wind was blowing from almost directly astern of the vessel, but just a small degree to starboard, the wind would be expressed as coming from "1 point

on the starboard quarter." If it was blowing almost perpendicularly against the ship's port side, but from just a little aft, the wind was expressed as "1 point abaft the port beam."

If the wind was blowing against the starboard side of the vessel at about a 45° angle with its bow, the wind was said to be "4 points on the starboard bow," or simply "broad on the starboard bow." If the wind was coming from directly ahead or behind the vessel, it was considered to be *dead ahead* or *dead astern*, respectively.

The 32-point compass was also used to express directional changes. For example, a captain might order his helmsman to put the ship "2 points to starboard," a task which had to be successfully fulfilled by the ship's quartermaster. ■ ■





## OUTGOING MAIL [continued from page 2]

creating graphics for the game); **Production** (the game is being printed, die-cut, folded, collated, and so forth).

**Note:** *Arcane Wisdom* (nee *DragonQuest Advanced Magic*) was inadvertently listed in *S&T* 84 as having been published. It should have been listed as in the Art Department.

**Rescue from the Hive.** From the halls of Ophiuchi to the moons of Tau Ceti the space marines ply their trade against Znon kidnappers. Karp/Karp. Production. *Ares* 7 game.

**Ragnarok.** The twilight of the gods from Norse mythology. Esakof/Esakof. AD. *Ares* 8 game.

**Laserburst.** Tactical ship-to-ship combat in deep space. Butterfield/Butterfield. Develop. *Ares* 9 game.

**Return of the Stainless Steel Rat.** The Harry Harrison character is pitted against a berserk computer and its programmer. Costikyan/Ritchie. Design. *Ares* 10 game.

**Land of Faerie.** Fantasy adventure against the backdrop of Olde England. Ritchie/Maxwell. Design. *Ares* 11 game.

**Ghostship.** Extraterrestrial contact is initiated when a mysterious meteor enters the solar system bound for Earth. Pecorini/Pecorini. Design. *Ares* 12 game.

**Galactic Trader.** Multi-player game of mercantile expansion on the far rim of the galaxy. Karp/Karp. Design. *Ares* 13 game.

**Cedar Mountain.** Jackson on the road to Antietam in 1862. Simon/Smith. Develop. *S&T* 86 game.

**Desert Fox.** The war in the desert at the strategic level. Berg/Karp. Develop. *S&T* 87 game.

**BAOR.** The third installment in the *Central Front* series covering the area north of the *Fifth Corps* front. Kamps/Maxwell. Design. *S&T* 88 game.

**Sicily.** Patton, Montgomery, and Kesselring compete for the island of Sicily in 1943. Rustin/Ritchie. Design. *S&T* 89 game.

**Monmouth.** Washington attacks the British after Valley Forge. Martin & Millman/Smith. Design. *S&T* 90 game.

**Singapore.** Folio treatment of the Japanese campaign in Malaya in 1941-42. Kamps/Ritchie. Develop. (See Progress Report in this issue.)

**Alamo.** Bowie, Travis and Crockett meet their doom inside a ruined mission in Bexar. Smith/Smith. Develop.

**Jackson at the Crossroads.** The battles of Cross Keys and Port Republic using the *Great Battles of the Civil War* game system. Reiser/Maxwell. Develop. (See Progress Report in this issue.)

**Corinth.** Volume 6 in the *Great Battles of the Civil War*. Berg/Smith. Develop. (See Progress Report in this issue.)

**Antietam.** The third of our large grand tactical Civil War games using the *TSS* system. Berg/Smith. Develop.

**Battle Over Britain.** Operational level treatment of Hitler's first great failure, the air attack on Britain. Butterfield/Butterfield. Develop.

**Against Four Worlds.** Interstellar warfare using the *BFM* game system. Simonsen & Hessel/Ritchie. Develop.

**Spies.** Strategy game of espionage in Europe from 1933-1939. Prados & Glynn/Ritchie. Develop. (See Progress Report in this issue.)

**Frontiers of Alusia.** Adventure map of part of a *DragonQuest* world complete with tourist guide. Kraft/Ritchie. AD.

**Advanced Monsters.** A *DragonQuest* supplement dealing with the wild and wonderful world of things that eat your face. Ritchie/Ritchie. Design.

**DragonQuest World Generation.** Complete step-by-step system for generating fantasy worlds for use with SPI's *DragonQuest* or other FRP campaigns. Jackson/Ritchie. Design.

**Arcane Wisdom.** Three new colleges of magic and a field guide to rocks, plants and other magical substances highlight this *DragonQuest* supplement. Ritchie/Ritchie. AD.

**Enchanted Wood.** *DragonQuest* adventure #3. Jaquays/Ritchie. Design.

**The DragonQuest Book of Days.** Handbook and calendar showing all of the High Holidays, phases of the moon, etc., necessary to plot out a *DragonQuest* campaign. Ritchie/Ritchie. Design.

**DragonQuest Randomized Dungeon Kit.** A boxed set of counters and rules useable in the creation of dungeons, mazes and labyrinths for play with *DragonQuest* and other FRP rules. Costikyan/Ritchie. AD.

**Universe.** Science Fiction role-playing game featuring entry-level rules systems. Butterfield/Butterfield. Develop.

**World War III.** Remake (in a larger format) of SPI's ever-popular *World War III* game. Ritchie/Maxwell. Design.

**Chickamauga.** Bragg versus Rosecrans in 1863 using the *TSS* game system. Smith/Smith. Design.

**Julius Caesar.** The campaigns in Gaul at the strategic level. Berg/Schachter. Develop.

**Hot Spots.** Modern tactical armored conflict using a software-oriented game system. Herman/Maxwell. Design.

Published since last issue: **Voyage of the Pandora, Fighting Sail.** David J. Ritchie

## FEEDBACK

*S&T* 83 closed out the year on an upbeat note with an overall rating of 6.54 to bring the average issue rating for 1980 up to 6.49. Not spectacular, to be sure, but healthy. In fact, if issue 81 hadn't garnered the worst rating since *Scrimmage*, this would have been one of our best years ever.

### FEEDBACK RESULTS, *S&T* 83

RANK	ITEM	RATING
1.	Task Force	7.02
2.	The Kaiser's Battle (article)	6.62
3.	The Kaiser's Battle (game)	6.58
4.	For Your Information	6.23
5.	Outgoing Mail	6.23
6.	Games Rating Chart	5.85
7.	Briefings 3	5.54
8.	Briefings 2	5.19
	<b>S&amp;T 83 Overall</b>	<b>6.54</b>

The proposal for a full-blown second edition of *Terrible Swift Sword* toted up a 107 and will almost certainly be done, but where we will fit it in the schedule is anybody's guess. At the moment, we have a truly daunting backlog of projects which have rated highly and which we want to do but which we simply don't have enough people on hand at present to bring to completion. Anyway, once we find a slot for it, we would like to publish a second edition of *TSS* complete with counters, new rosters and revised rules making the game compatible with the *Great Battles of the Civil War* series. More on that as and when....

David J. Ritchie

## JACKSON AT THE CROSSROADS

Joe Reiser turned *Jackson at the Crossroads* over to me for development at the beginning of January. Since then, work on the game has been proceeding at a healthy pace. The game situation is rather complicated, and presents an intriguing set of problems to each player, as each must operate with one flank on the offensive and one on the defensive. Historically, Jackson was waiting in the Cross Keys/Port Republic area to deal a telling blow to at least one of the two Union armies chasing him down the valley. The actual Union approach was so rapid, however, that he was taken by complete surprise. Only by the most aggressive counterattacking on Jackson's part, and the most dilatory behavior on the Union part, was Jackson able to escape both pincers of the trap.

Recreating the tremendous difference in command initiative between the two sides has proven a major problem. We have faced once again the inevitable dialectic between observing the historical rigidities of the actual event and providing the players with sufficient freedom of action to develop the potential of the historical situation. Joe, as was mandated by his role as designer, locked the players into a rigid sequence of limited initiatives based on actual events. I, as mandated by my role as developer, have tried to dismantle the obstacles to player initiative as much as possible.

The key to attaining this goal without destroying the historical nature of the game, and its value as a simulation, is in the honing of the victory conditions into a suitable framework for motivating player solutions which reflect the actual strategic objectives and the vulnerabilities of the two combatants.

Over many late night games, Joe and I hammered out a compromise that we are both happy with. In the process, we broke the game wide open. The Union Player has the capability to launch much more vigorous attacks than the major Union commander, Fremont, ever allowed. The Confederate Player is gifted with greater freedom of movement than Jackson considered prudent at the time. The result is a much more active game without the long lapses of inaction characteristic of much of the two-day struggle, and the potential, at least, for a wide variety of outcomes all over the map. These capabilities are not free, however, being woven into a matrix of checks and balances.

The game is now in the hands of a half dozen veteran blind-test groups who will shortly provide an objective evaluation of the changes made and their overall effect on play balance. So far, the initial reaction to the game as a whole has been very favorable. The various options that each Player faces in deploying his forces provide very challenging problems which most players enjoy, and lend a slightly strategic flavor to the game despite the highly tactical nature of the game system. Almost every area of the map sees action.

With the overall forces fairly evenly balanced, mobility plays a large part in any successful strategy, especially for the Confederacy. The Confederate forces enjoy the interior lines of communication and must take advantage of this fact to avail themselves of the uncoordinated positions of the Union pincers.

The game also includes four "What If" scenarios based on the events after Jackson's "capture," a very likely possibility considering that Union cavalry missed him by two minutes during the start of the actual battle. Among these scenarios is the very interesting alternative that Jackson's second-in-command, General Ewell, accepts the Union pincer move as successful and begins the game with the decision to march north



towards Washington with the whole Valley Army, thus effectively turning the tables on the trap. In all, this promises to be a very lively game.

Bruce Maxwell

## CORINTH

Richard Berg's game, *Corinth*, will be one of the three TSS system games issued for this year's Origins convention in San Francisco. The other two games will be Joe Reiser's *Cross Keys/Port Republic* and Jim Simon's *Cedar Mountain*.

**The Battle.** The battle of Corinth stands as probably the most evenly matched major battle of the entire American Civil War. The armies of each side numbered just over 20,000 men. In addition, both were veteran and ably led, at least at the brigade level. The leadership at division and army level was something else again. On the Union side was Major General William S. Rosecrans; on the south was Major General Earl Van Dorn. Rosecrans was an able organizer and leader of men. His main fault as a soldier was his inability to gain the initiative because the "right" moment to jump off never arrived, at least in his opinion. His lack of initiative eventually led him to disgrace at Chickamauga and to being relieved of command altogether at Chattanooga. Earl Van Dorn, on the other hand, was too much the rash cavalry trooper. He didn't lack for initiative; indeed, he had more than enough for two commanders. What he lacked was a sense of planning and orchestration. His defeat at Pea Ridge in the previous winter rankled him and he was anxious, even desperate, to regain his good reputation. His bloody defeat at Corinth led to a court of inquiry after the battle. He was cleared of all charges, but his career was at an all time low.

Van Dorn's plan at Corinth was to feint toward a city in Tennessee and then double-back on Corinth, thus striking what he hoped would be only part of Rosecrans' army. Rosecrans was alarmed by Van Dorn's move, and his natural cautiousness led him to do just the opposite of what Van Dorn had expected. He called his troops to mass at Corinth. The resulting battle was very bloody with much fighting in the woods as at Shiloh. In the end, the Confederates were bloodily repulsed after a two-day battle. Rosecrans did not pursue vigorously, and Van Dorn's shattered army got away. The Confederate assault was undone principally by the numbers of Union troops, the outer works (an entrenchment which covered the northern approaches to Corinth), and battery redans guarding Corinth itself. It was a kind of set-piece situation with the Union controlling the main defensive positions.

**The Game.** Richard Berg's initial design for *Corinth* was turned in this fall and was a very good and complete design. We playtested it during the evaluation procedure, and the players liked it. It was composed of a single map and almost exactly 200 counters. Its exclusive rules covered night, pre-dawn artillery barrages, special cavalry limitations, artillery rapid fire, unusual deployment rules, melee initiation limitations, and battery redans and secondary redans. After the game was accepted for publication, I was assigned as the developer.

**Development.** The first things I did as a developer were to make eight copies of the game and send them out to blindtesters and to write the government for additional map sources. It is very unusual to send out a designer's original submission to blindtesters. Normally the developer completely rewrites the rules and gets far into the development before blindtests are set. In this case, the manuscript was already in good shape and in SPI format, so I sent it out. I then organized my playtesters and began intensive play of the game. Almost immediately it became obvious that this game, like all games, had a few problems.

The first and most difficult problem to solve involved the game's set-up procedure and a tendency for the game to be unbalanced against the Confederates. In the original, the Union Player was given virtually free deployment, while the Confederate Player plotted the entry of his units onto the map through various assault areas. The Union Player was told the entry area of one of three Confederate divisions and then he set up his units. This led to the Confederates being trapped against the map edges if the Union Player set up well. To solve this problem, I have created a Union reserve of three brigades (out of 10) which must set up near Corinth. Historically Rosecrans held a third to one half of his army in reserve. In addition, I altered the movement through woods from 3 to 2. This helped the Confederates. Finally, I limited the Union to setting up no closer than five hexes from a map edge. These changes have made it possible for the Confederates to get on the map and avoid that "edge of the world" effect we all hate so much.

The second problem concerned the map and the order of battle. The battle of Corinth is not one of the better documented battles of the war. In fact, it is much less documented than Pea Ridge, to my surprise. When I was researching Pea Ridge, I thought I was having difficulties, but they were nothing compared to Corinth. The feds supplied me with a great map, indicating a band of fallen timber near the town of Corinth itself, in addition to the one outside the outer works. The timber outside the outer works delayed the Confederate attack considerably, and now I must assess the effect of the inner band of timber. The government map held no other surprises, but it did indicate that certain minor corrections were needed. I also hired Dr. David Martin to research the order of battle. He was able to turn up certain inaccuracies in the original, but he also came up against the fact that the battle is not well documented. So I'm left with the best OB I know how to get and the best map possible. I am currently working minute changes of weapon type, morale rating, and strength into the game. These changes will alter the game very little, but they will increase its accuracy.

**The Next Steps.** My next course of action is to monitor the blindtest reports very carefully. In doing this I will further assess the play balance of the game. This game will ultimately be one of the most balanced of wargames. It must be so because the actual forces are so equal and the battle was a close call for both sides. I am also thinking of including the exact historical set-up for those players who want to reenact the actual battle as closely as possible. This change will be a major piece of work and, if I do it, the historical situation will probably become the main scenario. The free set-up would still be included of course. I am also clarifying the unique melee rules. With the help of my blindtesters and my experience with designing *Pea Ridge*, writing standard rules, and developing *Wilson's Creek* and *Drive on Washington*, this game will turn out well.

**In Conclusion.** I wish all games were this easy and this much fun to develop. *Corinth* will be one of the most satisfying of all the projects I've been involved in. I think all of you will enjoy it.

Eric Smith

## ROADS TO MOSCOW

Properly speaking, *Roads to Moscow* is not a game at all. It is actually an expansion kit for the popular *Panzergruppe Guderian* which allows players to explore the possible consequences if the Germans had gone for Moscow after Smolensk instead of turning south to sew up the Kiev pocket. I evaluated the initial design favorably, but felt some trepidations about the job of developing it, as this would be my maiden effort in the R&D end of the hobby.

So far things are going quite well. Working with a proven game system like PGG has been a real advantage. Another plus has been the group of highly experienced playtesters working on this project (including one-time head of R&D, Terry Hardy). All are veteran PGG players and all have contributed greatly to the game's current level of play value.

A number of minor changes have been made in basic PGG in this extension. The most important include a system for variable ground conditions and their effect on both sides, German supply, and my personal favorite, Soviet Siberian reinforcements. The Siberians are placed on the map with their untried side showing as per the PGG rules, but the Soviet player *knows* their actual strength and so can better utilize them.

The game currently has several scenarios, including a historical scenario covering the German autumn drive on Moscow and the first part of the Soviet counter-offensive. In addition, we are considering a couple of versions of a campaign scenario, one with 53 turns and one with 40 turns. Both of these contain a number of special German options.

The historical scenario has been extensively tested with almost uniformly exciting results. Usually, the Germans start off the game by quickly breaking through the Soviet line, taking Vyazma, and rounding up an enormous gaggle of Soviet divisions caught in a pocket between the Dniepr and Vyazma. At this point, the German walkover tends to become a trudge as the autumn mud sets in, allowing the Soviets to regroup. With the arrival of the first frosts, the Germans are once again in a position to lunge for Moscow, but the Siberians are beginning to arrive as well and the real battle is only beginning. Skillful maneuver before Moscow during this latter phase of the game has almost always been the deciding factor in the testing to date.

Projected wind-up for this project is late spring and publication is scheduled for the fall of this year.

Rich DiNardo

## SINGAPORE

*Singapore* has recently been upgraded to a folio size game with far more support material than was to have been included in the game in its original capsule format. This has been accomplished without altering the map scale by increasing hex size from 16mm to 19mm. The room left over has been devoted to charts and tables (for which there was no room on the original map) and I think that ease of play should be increased accordingly.

As currently configured, *Singapore* has about 15 high quality Japanese units (mostly regiments) supported by a dozen air points hammering away at twice that number of Commonwealth units (mostly low quality new levies in brigade strength) supported by half a dozen air points. The Japanese regiments have zones of control which extend into most terrain types, include a number of important armor units (to beef up attacks along vital road and rail lines), and have generally superior mobility. In contrast, the Commonwealth units have zones of control only in the most open types of terrain (of which there are very few examples in Malaya), have no armor, and have a difficult time slogging through almost all types of terrain except plantations and mixed areas.

This is really one of only a handful of games on the market in which terrain actually benefits the attacker (by permitting infiltration and flanking and degrading the ability of the defender to respond to the initiatives of the more powerful attacker). As such, it has a definite (and most interesting) statement to make. In addition, *Singapore* quite clearly shows that history is easier



to mitigate than to change. Even with all of the remotely reasonable options available to the Commonwealth in the game, the Empire seldom manages to hold onto Singapore island throughout, and the primary goal of the Commonwealth player must be to make the Japanese conquest as pyrrhic as possible.

All of this jabbering about statements and lessons aside, the best thing about the game is that it is fun. The testers have especially liked the interface between the large map of Malaya and the smaller inset map of Singapore island where the game is finally decided. In fact, the inset idea is so interesting that we are thinking of putting a scenario in the game covering *only* the Japanese assault on Singapore island and playable on the inset map alone. Time being at a premium at the moment, we may or may not be able to get that in. Look for this game (finally) at Origins.

David J. Ritchie

## SPIES

Of all the projects currently on the schedule here at SPI, this is probably the most exciting and bids fair to be the most popular upon publication. In fact, we are all so confident that *Spies* is something special that SPI intends to sponsor its biggest tournament ever at Origins this summer, a 125 person, multi-round *Spies* competition with a \$1,000 cash prize going to the winner of the final round. Copies of the game will be mailed to all entrants a month before the event as part of the entry package and questions will be answered by mail or at a special introductory briefing immediately prior to the first round of the tournament. Those interested should refer to the Origins pre-registration form that appears in this issue of *S&T*.

The game itself is an intriguing treatment of the espionage war that raged in Europe between 1933 and 1939. Each of the five players takes on the role of spymaster for one of the major powers involved in that war (Russia, Germany, Britain, France, and Italy). Players have at their disposal police and counter-espionage pieces for use in defending their own secrets or rounding up enemy agents, a number of agent pieces which can travel around Europe collecting other people's secrets, a half dozen secrets worth various amounts of victory points to the player who controls them at the end of the game, Event Counters representing diplomatic and military events during the 30's which had a bearing on espionage, Action Counters which allow the player to exercise certain capabilities during play, and a fund of money (in Marks) with which to finance operations. Scattered around Europe in its major cities are 50 military secrets, some in neutral countries having no capability to defend them, and some in enemy countries blessed with effective police protection. During each yearly turn, players, in turn, move their agents and redeploy their police, playing Action Counters, capturing secrets, conducting sweeps to clean out nests of enemy spies, etc. Movement is by the expenditure of Movement Points to travel along rail or air lines or through sea zones. When a confrontation takes place between agents and police (or between two or more agents), a comparison is made of the relative strengths of the pieces involved to determine the outcome (secrets stolen, agents captured, etc.).

As secrets are stolen, they are carried to the player's capital and, once successfully delivered, placed on the player's box on the Turn Record where they remain until the end of the game. At that point, the value of the secrets (which only the controlling player knows) are multiplied by a Year Multiplier listed on the Turn Record for the year in which each secret was delivered. The resulting number of victory points are awarded to the

player. This simple calculation was not in the original game, but was suggested by mass market game designer and gaming historian, Sid Sackson, who has been providing us with the benefit of his wisdom on the project. Frankly, this addition makes all the difference in the world in the amount of fun inherent in play since the game becomes a dramatic exercise building in tension as 1939 (and the Second World War) draws ever nearer and the importance of stealing each secret increases.

Currently, *Spies* is undergoing testing out-of-house with a preview version scheduled for release at the beginning of June and a premier appearance set for Origins. David J. Ritchie

## THE SITUATION CURRENTLY

"Time conquers all." But then, on the other hand, "the more things change, the more they stay the same." One of the best things about cliches is that properly applied to any situation involving human beings, a cliché unfailingly renders an inarguable truth. One of the *other* best things about cliches is that it is inevitably equally proper to apply directly contradictory cliches to the same situation.

Take the hobby for example. By any measure, this is a time of great change. According to the latest intelligence gathered by the estimable H.A. Barasch, we experienced a growth of just short of 100% last year (as measured in dollars, a not unreasonable reflection of "activity" — see *S&T* 83, p. 18). This compares to an overall rate of growth of around 12% to 14% for the "Hobby Industry" as a whole (which includes, in addition to wargaming and role-playing games, model railroading, radio-controlled models, model kits, non-military miniatures, and crafts). Not surprisingly, at the annual Hobby Industry of America Trade Show in Atlanta during the first week of February, dealers and distributors who had previously confined themselves to selling life-like lichen for model railroaders were beating a path to the TSR, SPI, AH, and Heritage displays. It is likely that the people who have entered the hobby in the last year or so — mostly through fantasy role-playing — are an absolute majority of all the people who have been rolling dice in anger since the first *Tactics II* game in 1958. No doubt by several of the standards Alvin Toffler would apply, participation in the hobby these days can be continued only at the risk of a dose of "future shock."

But then on the other hand, things remain the same too. *S&T* is well into its second decade of games (with a practically unbroken tradition of one or two excellent games, three or four good games, and one turkey a year). AH's *General* is approaching its hundredth issue (with a completely unbroken tradition of ignoring all the games in the universe not published by AH). And the Origins convention continues to provide the hobby with a unique combined tournament/advanced seminar in game design and play/social event/game supermarket. (Most Hobby Industry companies announce new products at the HIA trade show in February, where consumers aren't even allowed in, let alone to sample the wares. But in our hobby much more new stuff is released at the Origins consumer show than at the HIA show — which makes sense for small companies without much retail distribution who need the exposure, and possibly less sense for larger companies like SPI... but releasing new stuff at Origins is good PR and besides, fun!)

Things at SPI are changing and staying the same also. Over the last four months, we have conducted an intense self-analysis of where we are and where we want to go. One product of this effort is a 14-page Long Range Plan. The high-

lights of the plan with regard to product are a provisional decision to publish a series of modern games by subscription (the decision is dependent upon upgrading our typesetting capacity which will not happen before fall of 1981) and a set of guidelines for selecting non-magazine product. We will publish six to nine major wargames outside of *S&T* each year (and we will cease boxing and selling separately all *S&T* games for the next twelve months at least). We will publish three to six major sf/fantasy games besides those which appear in *Ares* (and once again, not every *Ares* game will automatically be sold separately). Look for the size of *S&T* and *Ares* games to increase upon occasion, too. At least one 400-counter *S&T* game is in your future this year, and the upgrading of *Ares* games to full-size (22" x 34" or 17" x 22" map and 200 counters) will take place within the next four issues. And with our decision not to sell *S&T* games separately from the magazine, we are considering re-instituting a variation of the deluxe subscription service we used to offer. This would afford subscribers the opportunity to have their sub issue delivered with a compartmented insert tray and a die for each *S&T* game. We have asked a feedback question about this possible offer, so let us know what you think.

One other thing that has changed are SPI prices. (Sorry guys — couldn't hold the line any longer. SPI is probably not the *only* company in American not to raise prices in 1980 — but our last previous price rise was in July of 1979, believe it or not.) Looking over the price list that accompanies this issue, astute observers will note that a few prices have actually been *decreased* (e.g., *Bloody April* from \$27 to \$25). We have carefully priced each product on the basis of actual costs (reprint or first-run, taking into account staff salary spent on design, development, graphics and production). This may not be the most reasonable price list in SPI history, but it is the most rational.

Another thing that price list students will note about this new one is its *brevity*. We have dropped several dozen titles from our active complete line. We have done this for several reasons, the most important of which is the necessity to simplify the logistical considerations involved in keeping our games in stock. The new price list is *solid*, in that through the end of 1981 (when we will re-evaluate the list), we are committed to keep all 66 games on it in print and available. In fact, a few games were left off the list despite the fact they are good games and popular because we could not guarantee their availability (*War in the Pacific* and *Wellington's Victory* are in this category).

Many more games were dropped because they were just not that popular, or because though rated highly they did not sell well. Games in this category include *Battle for Cassino*, *Plot to Assassinate Hitler*, and *October War*.

Finally, all games in "odd" packaging configurations have been dropped from the list. This includes all "folio," plastic flat-tray boxed, and Z-pack-only games. This will allow us, later this year, to publish a 4-color multi-page catalogue showing all 66 guaranteed-available games for both the wholesale and direct mail markets. We have some folios and flat-tray games for which we *could* guarantee availability, but almost no stores (and precious few direct mail customers) are particularly interested.

We will continue to make those games we have that are not on the new list available to our distribution network for full-service hobby shops that are interested. But it will be on a "remainder" basis, so if you've always had the hots for *Objective: Moscow*, *A Mighty Fortress*, or *The Conquerors*, get your dealer to order them now, while the supply lasts.



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SPI will be represented at several summer conventions. Here is a list, along with the address to write for more information.

MichiCon 10  
12-14 June 1981/Rochester, MI  
Metro Detroit Gamers  
MichiCon 10, Box 787  
Troy, MI 48099

Origins '81  
3-5 July/San Mateo, CA  
Pacific Origins  
Box 5548  
San Jose, CA 95150

Gen Con East  
23-26 July/Cherry Hill, NJ  
Gen Con East  
Box 139  
Middletown, NJ 07748

GenCon XIV  
August/Kenosha, WI  
GenCon  
Box 756  
Lake Geneva, WI 53147

We are planning special things for each of the Cons listed above, including release of new products, tournaments (with a \$1,000 top prize offered at our *Spies* game tournament at Origins), seminars, and special events. These include a mini-version of the famous SPI Roast at each convention (at which the staffers in attendance will allow themselves to be pursued by grognards armed with torches and pitchforks); a demonstration of the *Universe World Generation* system by John Butterfield (and in some cases a complete *Universe* adventure run by John); a seminar on our ongoing *Great Battles of the Civil War* project at which Eric Smith will discuss the games on the schedule or under evaluation and will recruit testers, writers, researchers and designers; seminars on the *Central Front Series*, modern games in general, and the planned *Modern Quarterly* given by David Ritchie, John Butterfield and (the new guy) Bruce Maxwell; a seminar and Q&A session on *DragonQuest* (including upcoming *DragonQuest* products) with David Ritchie and friends; and seminars for subscribers to all of our magazines (*Ares*, *Moves* and *S&T*) with Brad Hessel, David Ritchie, Redmond Simonsen and others.

## What will be your role in the Universe?

We are also currently negotiating with several individuals and groups to run *DragonQuest* and *Universe* adventures and tournaments and demonstrations of *Creature That Ate Sheboygan*, *Chickamauga*, *NAW* and several larger games. We are even trying to arrange for the showing of some freebie films that relate directly to SPI games. In short, we want to make this summer's convention season bigger, better and more fun than ever. We are especially interested in seeing as many old friends (and new ones too) as possible this summer in an effort to generate some feedback on the new directions we are taking and also to recruit some of you out there into a more active role in SPI in the upcoming year. So come on out and look us up!

Finally, one word of warning — there is a reasonably good chance of a postal service strike early this summer. The current contract expires 30 June 1981, and "job actions" are not inconceivable prior to that date. In the event of a strike, SPI will still accept credit card direct orders by phone for addresses that can be serviced by

UPS (i.e., within the US). So get a Mastercharge card and an address that is not a PO Box. And read this *S&T* slowly — the next one may take a bit longer getting through. *Brad Hessel*

## GOSSIP

The National Hobby Industry held its annual show in Atlanta in February. This trade show which brings together hobby shops and hobby distributors from around the country included 36 Adventure Gaming Companies intermingled amongst the model plastic, railroad, doll house miniatures and various craft booths. Interest in the Adventure Gaming Industry was high with even more retailers and wholesalers wanting to get involved. Many also wanted to increase their involvement by carrying a larger number of companies and greater depth in their products.

Taking a commanding lead in the Adventure Gaming march to expansion and greater recognition was TSR Hobbies, Inc. TSR certainly spared no expense in putting together the most impressive booth at the show. An elaborate grade B movie set was constructed which I believe was left over from "Maciste and the Valley of the Italian Extras." The booth, in the form of a castle, was complete with a gateway guarded by a blood-shot eyed dragon (obviously a frequent guest at the TSR office parties). The impressive booth, which also featured a rotating wizard perched high on the battlements, won the HIA award for best booth at the show. Oh yes, once you got past the booth, TSR did feature some products. *The Dungeons and Dragons Expert Set* (\$12.00) was revealed as the next step after Basic *D&D*. The latter was given a new packaging face-lift complete with a more impressive cover. New modules for the basic and experts sets will also be forthcoming in 1981. The modules for *Boot Hill* (Mad Mesa), *Top Secret* (Rapidstrike) and *Gamma World* (Legion of Gold) are also on their way.

TSR will also be joining the minigame market with four entries later this year: *Saga: The Age of Heroes* (mythology); *Galactic Arena* (science fiction); *They've Invaded Pleasantville*; and a Count Dracula game. TSR has again started the manufacture and sale of polyhedral dice. The dice will be included in future sales of boxed TSR role-playing games sets. The elimination of the dice has caused a shortage in the country and had a half dozen companies committing big bucks for tooling up to fill the void. TSR's re-entry may hurt many of them. Down the road, TSR is planning a science fiction role-playing game, *Star Frontiers*. They have even been in deliberation occasionally with OSG. Random House will handle the distribution of the *Dragon* magazine, which incidentally has surpassed *S&T* in circulation.

Avalon Hill presented its upcoming products for the first half of 1981 for both boardgames and their fledgling microcomputer division. *Amoeba Wars* (\$16) was shown as the planet-gobbler of science fiction; *Gladiator* (\$9) is the second half of the Battletline *Circus Maximus*; *Guns of August* (\$17) is a corps-level WWI game; *Moonstar* (\$13) is a dice game of logic and planning involving no luck; *Bureaucracy* (\$20) is a serious spoof of government incompetency. However, at that price, the sales may only come from government purchase orders.

Prices of Avalon Hill games moved up a notch: both *Squad Leader* and *Diplomacy* went to \$17, with most of the other bookshelf games going to \$16. Almost all the flat boxed games were priced at \$14. Jackson Dott, Eric's son, will head up new products for the Microcomputer Games Division of Avalon Hill. Added to the line are conversions of existing boardgames for the 32K TRS-80, Apple II and Pet 2001 computers. AH

[continued on page 53]



# For Your Information

## A Wide Ranging Survey of Historical Data and Analysis

Volume 1, Number 4  
Edited by Brad Hessel  
and A.A. Nofi

### DID YOU KNOW...?

► The very first submarine war patrols were undertaken by several small boats operating out of Vladivostok during the Russo-Japanese War in 1905, although without any combat success. The boats had been shipped disassembled across Siberia after the war broke out.

► In 1914, a French Army Corps required eight railroad cars to carry its daily bread ration!

► Alexander the Great's "Grand Phalanx" of 32,000 pikemen occupied a front of approximately one kilometer, a density of 32 men per meter.

► "They couldn't hit an elephant at this dist..." These were the last words of General John Sedgwick, sniped as he surveyed Confederate positions over the parapet of an earthwork at the Battle of Spotsylvania in 1864.

► During World War I, Britain developed a special attachment for the 3-inch Stokes trench mortar which theoretically adapted it for use in an anti-aircraft role. There is, however, no record of any aircraft having been downed by such a weapon.

► The crossbow, a weapon of considerable antiquity, has been used in action as recently as the Vietnam conflict. A particularly exotic development — a nine-foot weapon firing six-foot steel bolts in an anti-aircraft role — was captured by the 1st Cavalry Division in 1965.

► The most-sunk warship in history was the US submarine *Tang*. The Japanese claimed to have sunk it 25 times before a circling torpedo finally did the job for them. The record for surface ships was the US carrier *Enterprise*, which the Japanese claimed sunk six times.

► The normal combat patrol of a German submarine during World War I was only 17 days, of which only five were actually spent on station, the balance being consumed in transit. The longest combat patrol by a German submarine in the war was one of 25 days, by the U-38 in 1915.

► The firearm in service for the longest period of time is undoubtedly the British Ordnance Tower pattern musket, better known as "Brown Bess," which was introduced into the British Army in 1695 and served with the redcoats until 1854, and in colonial units for some years after that. The most long-lived weapon of the present century is probably the French 75mm M1897 field gun, the famous "French 75," which still soldiers on in the armies of Mexico, Ivory Coast, Cameroon, and Upper Volta.

► Of the 50 "four-pipe" destroyers transferred from the US to Britain in 1940, none had a more unusual war career than the *HMS St. Albans* (ex-*USS Thomas*), which not only sank the German submarine U-401 but also, by mistake, the British minesweeper *Alberic* and the Polish submarine *Jastrab*.

### From the Dustbin of History

A rational army would run away.  
— de Montesquieu

### FOOTNOTES

#### World War II, Day by Day

World War II is generally thought of as a war of movement. Yet, an evaluation of available data from the principal campaigns in Europe during the war yields a statistical daily rate of advance for the entire war in Europe from 1939 through 1945 of only 16.8 kilometers. In fact, on a year to year basis, the war actually slowed down as time went on. The average daily rates of advance for each year are given here, based on a statistical analysis of the principal operations of each year.

YEAR	KM/DAY
1939	22.5
1940	12.3
1941	21.0
1942	15.3
1943	10.0*
1944	17.1
1945	13.9

\*Note that figures for 1943 have been estimated due to insufficient data on a broad basis.

1939 22.5  
1940 12.3  
1941 21.0  
1942 15.3  
1943 10.0\*  
1944 17.1  
1945 13.9

*Mechanized Warfare, 1940-1980*

#### A Distinction of Some Sort

Probably the most "hard luck outfit" of all time was the German 26th Infantry Division during World War II. Raised as one of the "First Wave" divisions as part of the expansion of the German Army in 1935-36, the unit was recruited from Cologne, in *Wehrkreis XXI* in the Rhineland, and bore that city's famed cathedral as its emblem. The division campaigned in France in May and June of 1940, then did some occupation duty, and was eventually assigned to the Eastern Front in June of 1941. It was at this point that the division's troubles began.

Between June of 1941 and September of 1944, the outfit distinguished itself repeatedly in combat, almost always being in the thickest action, such as at Kursk and Kowel. But it also managed to be almost totally destroyed seven times in this period, each time being rebuilt. After its seventh brush with dissolution in East Prussia in September of 1944, the division was rebuilt yet again, partially from surplus naval and air force personnel, as part of the "32nd Wave," redesignated a *Volksgrenadier* division, and sent west. In December, it participated in the Battle of the Bulge, to be virtually exterminated yet again! Rebuilt still another time that spring, it finally went down with the Third Reich in the final weeks of April, 1945. In 46 months of combat, the unit had been destroyed nine times, an average of once every 5.1 months. Surely this is a distinction of some sort.

*German Army Order of Battle, 1939-1945*

#### The Cost of War

During the American Civil War, one method of inducing men to enlist was to offer a cash bounty. Even after the institution of the draft in mid-1863, this practice continued, since a locality which fulfilled its draft quota through voluntary enlistment was free from conscription. Of course, competition among localities for available manpower was fierce. There was a Federal bounty, and virtually every state offered an additional

bounty, as did many counties and most cities. It is believed that some \$750,000,000.00 (in good 19th Century money) was paid out in bounties during the war to enlist a grand total of 1,722,690 men, or roughly \$435.36 for each man. This enormous sum was...

...equal to the entire army payroll for the entire war, at a time when privates made \$15 a month.

...greater than all quartermaster expenditures for the entire war.

...equal to twice the cost of all rations issued during the war.

...five times greater than the cost of all 7,892 pieces of artillery procured during the war.

*United States Army, History of Military Mobilization*

#### "Tout Pour la France!"

One of the most ancient and distinguished French noble families is the de la Rochefoucauld family of the Vendee. Precisely why they merit distinction, however, is difficult to ascertain. Francois de la Rochefoucauld, for example, joined the English Army in 1693 and eventually rose to become the first British field marshal when that rank was created in the early 18th Century. His principal occupation during this period was, of course, war against France. About a century later, the family again rose to prominence as leaders of the Vendean revolt against the Republic in 1795. Twenty years later, the two principal sons of the family led the Vendee against Napoleon during the Hundred Days, both being apprehended and shot. And nearly 150 years later, the family was numbered among those Frenchmen who found little difficulty getting along with the German Occupation in 1940-44. Indeed, Rommel made his headquarters very comfortably in the family *chateau* while in command of Army Group B, and the head of the house was subsequently convicted of collaboration. Whatever happened to *noblesse oblige*.

#### The Other Side of Helmuth von Moltke, "der Alte"

Aside from his remarkable abilities as a military organizer and strategist crowned by his direction of the Prussian victories over Austria in 1866 and over France in 1870-71, Helmuth von Moltke (1800-1891) was also a noted author, producing numerous short stories, novels, historical essays, and other works of considerable literary merit during his long life. Indeed, he was one of the most popular German authors of his century, and he retains an important position in German letters even today. Fluent in at least five languages, he kept his diary in three of these interchangeably: Italian, English, and French. His military career, which began in 1822 in Danish service, included service in the Turkish Army as well as in the Prussian. But until 1866, when he exercised supreme command under the King, he had never directed so much as a company in combat!

T.N. Dupuy, *A Genius for War*

#### Ali Baba and the Forty Thieves

The 40th Regiment of the Royal East India Company's Bengal Army in the 19th Century was

[continued on page 19]



## ON THE QUALITY OF INFANTRY The Revolutionary and Napoleonic Wars, 1789–1815

Attempting an objective comparison of the quality of the infantry of various armies over a tumultuous period of some 25 years is, at best, a difficult task. Moreover, it is not necessarily a rewarding one inasmuch as any such evaluation will undoubtedly be somewhat inaccurate. Nevertheless, that is precisely what we are attempting here: a comparison of the quality of the infantry of the principal European armies during the period of the French Revolutionary and Napoleonic Wars.

The basis of comparison is the infantry division, assumed at about 4,000 men, with whatever artillery and supporting personnel of other arms which might normally be attached according to operational doctrine. The estimates of relative effectiveness have been made on the basis of the quality of personnel available, equipment, tactics, leadership, morale, and operational performance.

**Pre-Revolutionary Situation: 1789.** On the eve of the Revolution, the French infantry was probably the best in the world. It possessed excellent tactical doctrine, a sound administration, and effective leadership. The Prussians and their pupils, the British, were not far behind the French, but the Austrians and the Russians were decidedly inferior — the latter particularly — due to organizational confusion, administrative chaos, ethnic diversity, general incompetence and, in the case of Russia, wholesale corruption. Of course, none of these armies had been extensively tested in battle for many years. Thus, all were highly inexperienced.

**The Early Revolutionary Period: 1789–1792.** Initially the Revolution weakened the French Army. Officers, dissatisfied with the new trend, left the service. As the Revolution took a radical turn, the exodus became a flood, abetted by Mme Guillotine. Their infantry was probably the worst in Europe by the beginning of 1792. In the same period, the British, Prussians, and Austrians had made modest improvements in their infantry. In Britain, for example, this took the form of new drill regulations, the introduction of militarized transport elements, and the formalization of the new light infantry. The Russian infantry declined in quality, as a disastrous war with Turkey demonstrated.

**The War of the First Coalition: 1792–1797.** The onset of the Revolutionary Wars brought rapid improvements in the quality of the French infantry as volunteers and, more importantly, conscripts were amalgamated with the core of the old Royal Army. Within a year or two, the French, using innovative tactics, were asserting their primacy once more. Though subject to considerable fluctuation in

overall performance due to political difficulties, poor leadership, and supply problems, the French ended the War of the First Coalition with an infantry second to none.

The British probably kept abreast of the French, although no Franco-British engagements of any consequence occurred to serve as the basis for a more scientific evaluation. The Austrians generally improved as well, despite serious defeats, though reform-minded officers had a tough go of it. The Prussians, however, defeated in a non-infantry battle at Valmy early in the war, found their morale going to pieces and pulled out early. As for the Russians, despite the efforts of effective leaders such as Suvorov, they remained at a low level of effectiveness.

### The War of the Second Coalition: 1798–1802.

During this period, the quality of the French armies initially fell quite seriously due to the extreme inefficiency of the government; but halfway through the war, Bonaparte seized control. Thereafter the army benefitted from effective administration and steadily increased in quality in all arms. By the end of the war, French infantry was probably again equal to that of Britain. The Prussians, neutral in the war, also made improvements in their infantry, but generally along obsolete lines. The Austrians suffered almost total defeat, however, and the quality of their infantry declined. Peace clearly saved them from worse. The Russians, gaining some combat experience under Suvorov, gradually improved the efficiency of their forces.

**The Peace: 1802–1805.** For the French infantry, this was probably the most important period of the wars, for it received the only proper training it was ever to have during the long struggles. Quality soared as Napoleon refined the instrument of his Imperial ambitions. The British kept pace, fortunately never having to fear immediate combat on someone else's terms. Of course, the peace was good for all the armies. The Austrians probably improved the most, though remaining inferior to all except the Russians, who improved little, if at all.

**The War of the Third Coalition: 1805–1807.** This was the period of undisputed French superiority, though the British were probably as good.

Both the Austrian (1805) and Prussian (1806) armies went down to disastrous defeats, but the Russians proved more tenacious, though a conclusive clash would almost certainly have favored the French. However, by the end of the war the French were beginning to have problems. Their infantry would never again reach the qualitative standards of this period as more and more foreign elements were incorporated from annexed areas to compensate for shortages in French manpower.

**The Grand Empire: 1808–1811.** The period of the height of Napoleon's empire coincides with the first serious setback to French military primacy. Austria, seriously involved in reform since 1805 under the Archduke Karl, managed to produce infantry nearly the equal of France's before going down to defeat in 1809. This hurt badly, but the real problem was Napoleon's intervention in Spain, beginning in 1808. Spain consumed tens of thousands of veteran troops, eroding the vital cadres which formed the backbone of the infantry. In a period when Russia, Austria, and Prussia — this last handicapped by treaty restrictions — were rapidly improving their forces, France was having difficulties maintaining the quality it possessed. When the British entered long term, serious combat in Spain, they began to prove their superiority almost immediately.

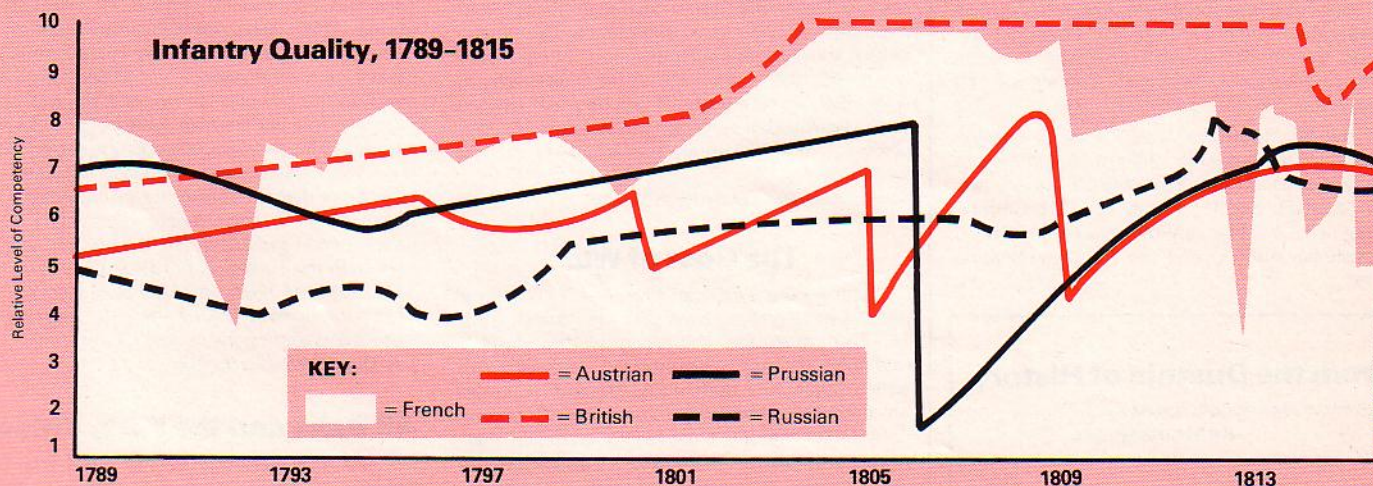
**Russia: 1812.** For his massive invasion of Russia, Napoleon commanded the best infantry in Europe save that of the British. But the Russians, defending their native soil, demonstrated remarkable powers of resistance. The Prussians and Austrians, Napoleon's reluctant allies, showed that they were by no means to be discounted.

**The War of Liberation: 1813–1814.** The Russian campaign virtually destroyed the French infantry. Linked with the steady drain of operations in Spain, the quality sank incredibly. To be sure, through remarkable efforts, Napoleon managed to rebuild in short order, only to suffer a second crushing defeat in the Battle of Leipzig (16–19 October 1813). Although he tried to rebuild yet again, the Allied invasion of France in 1814 proved too much, and Napoleon quit. In this period, the quality of the Russian, Prussian, and Austrian infantry began to surpass the French. The British remained, unquestionably, supreme.

**The End: 1814–1815.** The rapid onset of peace in 1814 caused a substantial increase in the quality of the French infantry as the army was pared to more manageable size. The British quality fell as the fine regiments from Spain were shipped off to be massacred either by tropical diseases or by American riflemen.

Then, in 1815, Napoleon came back. Rapidly rebuilding the army by incorporating numerous returned prisoners of war, Napoleon raised the quality of the infantry once more to the status of the best in Europe, if only briefly. At Waterloo the British, though no longer as good as they once were, proved themselves equal to his forces with Prussian aid.

The accompanying table attempts a summary of the ratings discussed throughout the text, assigning numerical values to the quality of the infantry in each of the five armies under consideration, with 10 indicating the best and 1 the worst.





## FOOTNOTES (continued from page 17)

recruited among wild Pathan warriors living along what is now the Pakistani-Afghan frontier. Their ferocity in action, coupled with their larcenous dispositions and the coincidence of their unit's numerical designation, very early caused them to be nicknamed "The Forty Thieves." Thereupon, as inevitably as night follows day, the regimental commander was, appropriately and permanently, referred to as "Ali Baba" by all and sundry, and the regimental adjutant, of necessity, as "Abu Hasan," after the leader of the bandits in the tale of Scheherazade. Today, of course, the regiment no longer exists. But it is to be presumed that the Soviet Army is being warmly received by the heirs of "The Forty Thieves" in Afghanistan today.

T.A. Heathcote, *The Indian Army*

## Record

The largest explosive mine ever detonated in wartime was probably the British Messines or Wytschaete Ridge mine, set off at 0310 on 7 June 1917 in Flanders. A total of 933,000 pounds was used — nearly half a kiloton — deployed in 19 separate charges planted at depths of from 50 to 100 feet along some 15,000 yards — over seven miles — of painstakingly and meticulously excavated tunnels. The blast knocked down buildings up to 400 yards distant, was heard some 130 away in London, and felt nearly 500 miles off in Dublin. Two German divisions were virtually obliterated by the explosion, and portions of three others were severely mauled. The explosion resulted in some 10,000 dead or missing and over 7,000 prisoners, some so dazed that they were unable to give their names for days afterwards.

As a result of this one blast, the British advanced fully 1.75 miles, nothing to speak of, even by World War I standards, albeit that the British casualties were virtually nil. Interestingly enough, two additional mines failed to go off, and their precise location was eventually lost. One exploded spontaneously in 1956, causing considerable damage. The other remains unlocated and unexploded to this day. The record mine may yet claim additional victims.

Arch Whitehouse, *Heroes and Legends of World War I*

## Bottoms Up!

In the Russo-Finnish War of 1939-40, Soviet paratroopers were several times dropped without parachutes. They were packed into bomb bay-like compartments under the wings of TB-3 bombers and dropped into deep snow from 30 feet altitude while the aircraft flew as slowly as possible. While most of the Soviets survived the drop, their equipment made them fall head first. As a result of their landing posture, they became lodged, waist-deep, upside down in the snow, in which position they were normally dispatched by Finnish ski patrols.

## His Honor, the Emperor

Shortly before the death of Napoleon, a plan was afoot in New Orleans to rescue him from the South Atlantic island of St. Helena, bring him back to the Louisiana city, and install him in the residence of the mayor, Nicholas Girod. An expedition was planned under the command of Dominique You, a former pirate and hero of the Battle of New Orleans; but before the plan could be implemented, Napoleon died. Girod's house still stands in New Orleans and is known there as the "Napoleon House."

## Where Have All the Soldiers Gone?

The exact figures will probably never be known, but approximately 500,000 soldiers of the German armies are still missing in action from World War II, and nearly 150,000 German civilians

are still unaccounted for, mostly from air raids. The West German Red Cross tracing service has located or answered doubts about more than 1.2 million soldiers missing in action, and about 208,000 missing German civilians. While they have reunited many parents and children separated by the war, the Red Cross believes that about 3,000 children are still alive and "missing."

## Brushfire War

In September of 1942, a Japanese plane flew over Oregon on two occasions and dropped incendiary bombs in an attempt to set the forests afire. The plane was float-equipped and had been carried across the Pacific by the submarine I-25. At the time, it was assumed that the forest fires of 1942 had been started by Japanese bombs carried in balloons. It was not until many years after the end of World War II that it was revealed that the American mainland had been bombed from the air for the first time.

## Guess Who's Coming to Dixie?

During the Civil War, the Union had a general with the unlikely name of Jefferson Davis. He was of no known relation to the Confederate president and served in the west in the Army of the Cumberland, where he commanded several divisions before rising to command of XIV Corps during the Atlanta Campaign. He continued to lead XIV Corps in the March to the Sea and through the Carolinas in 1865. Aside from his name, he is best known for his wartime murder of fellow Union General William "Bull" Nelson in a Louisville hotel. Davis was never punished for this act, although he was never promoted in rank afterwards, remaining a brigadier general for the rest of the war.

Marc Boatner, *The Civil War Dictionary*

## Officers and Men

In April of 1945, the United States Army, including the Army Air Forces, totaled 8,267,958 men, of whom 891,663 (10.78%) were officers and 7,376,295 enlisted personnel. By rank, these officers and men amounted to:

RANK/GRADE	NUMBER	RATIO	%
General (all)	1.5	5512	0.02
Colonel	10.6	780	0.13
Lieutenant Colonel	28.2	293	0.34
Major	69.2	120	0.88
Captain	195.2	42	2.36
1st Lieutenant	322.5	26	3.90
2nd Lieutenant	208.3	40	2.52
Master/1st Sergeant	112.5	74	1.36
Technical Sergeant	217.3	38	2.63
Staff Sergeant	613.3	14	7.42
Sergeant	1,055.0	8	12.76
Corporal	1,547.0	5	18.69
Private (all)	3,853.5	2	46.61

**NOTES: Number:** In thousands of personnel in each grade or rank. **Ratio:** Approximate number of personnel in the army of all other ranks or grades for each person holding the indicated rank or grade (e.g., there were 120 people in the army who were *not* majors for every one who was). **%:** The percentage of the total army composed of persons of the indicated rank. Altogether, roughly one out of every 10 people in the army was an officer. Of the officers, only 0.5% (c. 4,500) held Regular Army commissions; 2.3% (c. 20,500) were from the National Guard; about 17% (c. 151,600) were Reservists; nearly 75% (c. 669,000) were commissioned from civilian life or the

enlisted ranks via OCS and similar training programs or through direct commissioning of technical experts such as medical personnel; and fully 5.5% (c. 49,000) held so-called "battlefield commissions." Only about 2.2% (c. 19,600) of the officers were World War I veterans. During the war, reclassification boards sat to examine the suitability in rank or assignment of 6,700 (0.7%) officers, of whom 327 (4.9% of those examined) were demoted, 4,123 (61.5%) were expelled from the service, and 2,250 (33.0%) were reassigned, with no action being taken in the balance of the cases (0.6%).

John Ellis, *The Sharp End*

## My Son, the Sapper

During the British *Raj* in India, a new *varna*, or sub-caste, appeared in the southern part of the subcontinent known as the *Quinsap*. The *Quinsapi* consisted of families whose men served in the "Queen's Own Madras Sappers and Miners." They observed rigid rules of caste distinction. For example, no *Quinsapi* would ever marry anyone who was not the daughter of another *Quinsapi*.

T.A. Heathcote, *The Indian Army*

## Weather Conditions at Gettysburg

The weather at the height of the Gettysburg campaign was unusually cool and cloudy, according to records taken by Dr. Jacobs of Pennsylvania College (now Gettysburg College). Note that temperatures warmed up noticeably when the battle began on 1 July 1863 and were at their hottest at 2:00 p.m. on 3 July, when Pickett's Charge was at its crest.

DATE	DAY	TEMPERATURE (°F)		
		7:00 a.m.	2:00 p.m.	9:00 p.m.
25 June	Th	59	51	63
Rain 8:00 p.m. 25th in intervals to 7:00 a.m. 27th				
26 June	Fr	60	63	62
27 June	Sa	61	63	67
28 June	Su	63	67	68
29 June	Mo	66	72	69
30 June	Tu	68	79	71
1 July	We	72	76	74
Very cloudy				
2 July	Th	74	81	76
3 July	Fr	73	87	76
6:00 p.m. thunderstorm nearby				
4 July	Sa	69	72	70
Showers at 6:00 a.m. and 2:15-4:00 p.m.				
5 July	Su	na	na	na
Shower at 4:00 a.m.				
6 July	Mo	na	na	na
7 July	Tu	na	na	na
Showers				
8 July	We	na	na	na
Heavy rain				

Dr. David G. Martin

## Foreigners in the Legion

In the early 20th Century, the personnel of the French Foreign Legion — about 2,500 men — were 45% Alsatian, 12% German, 8% Swiss, 7% Belgian, 5% each of Frenchmen, Spandiards, Americans, and Italians, 4% each Austro-Hungarian citizens and Belgians, and statistically insignificant numbers of others. The Alsatis, of course, were reluctant German citizens patriotically rendering service to *la belle France*. The French-



men, aside from officers, were probably serving illegally. Note that, despite *Beau Geste*, the English are included among those considered "statistically insignificant."

## Military Tradition of the Empire State

Governor's Island in New York Harbor, presently a Coast Guard installation, is the oldest continuously occupied military post in the United States, having been established as such about the time the Dutch bought Manhattan in 1626. It has been the site of uninterrupted military activity ever since. However, West Point has the distinction of being the oldest continuously active *United States* military post, having been uninterruptedly in active service since 1778.

Mark M. Boatner III, *Encyclopedia of the American Revolution*

## When the Balloon Went Up: 1914

### An Outline Order of Battle of the Armies of Europe

ARMY	XX	X	XX	X	FIELD STRENGTH
Albanian					c. 60.0
Austr-Hung	49	10		5	1,338.0
Belgian	9	1			160.0
British	11(5)	3(1)	1	1	250.0
Bulgarian	12	1	7	1	300.0
Danish	3		1		85.0
French	82(4)	10	5(1)	1	1,800.0
German	87	11	27		2,147.0
Greek	8	1			150.0
Italian	35(4)	4			916.3
Montenegrin			11		60.0
Netherlands	6			1	100.0
Norwegian			7		70.0
Portuguese	6			2	150.0
Romanian	15	2	1	5	300.0
Russian	114	36	?	?	2,500.0
Serbian	12	1	3		250.0
Spanish	14	1	3	3	300.0
Swedish	6	1			200.0
Swiss	6			4	250.0
Turkish	36			4	400.0

**Notes:** The table presents an outline of the major combat units available to all of the powers of Europe at the onset of World War I in August of 1914, plus a rough indication of available field strength, a figure usually lower — and in some cases considerably lower — than total mobilizable strength (e.g., Russia's mobilization strength, upon completion, was in the vicinity of 6,000,000 men, but most could not be used in the field without training or retraining and without equipment). Units indicated under infantry divisions include all types, whether normal infantry, mountain, fortress, reserve, or territorial, available for use *immediately* upon mobilization. Thus, some 14 territorial divisions theoretically available in Britain in August of 1914 are excluded as being unready for service. In fact, none of them shipped out until early 1915. Parentheses () around a number indicates that a portion of the units in the appropriate category were overseas in colonies and not immediately available for service in Europe. In the case of France, those North African units assigned to the armies in France are *not* indicated by parentheses, as they shipped to France quite quickly. It is important to note that six of the

Belgian infantry divisions were about 50% larger than French ones, and that Bulgarian infantry divisions were nearly twice the size of the contemporary French divisions. Likewise, British cavalry divisions ran nearly twice the strength of French or German ones. Albanian forces were composed purely of unorganized militia. An eventual source of reinforcements for the British before the end of 1914 was India, where six divisions were maintained by the Government of India, each approximately 40% British. For purposes of comparison, the American Army at this time had 18 infantry and two cavalry divisions theoretically existing between the regular Army and the National Guard, but a field strength of no more than 80,000 with considerable effort. Japan, by comparison, had 19 infantry divisions and four cavalry brigades, with a field strength of about 260,000.

## How Much is That in Privates?

The exchange of prisoners between belligerents is an ancient military custom, but rarely observed in this century — although there were, in fact, some British-German exchanges even in World War II. Of course, not all prisoners are of equal value. Thus, negotiations to establish ground rules for such exchanges usually revolve around establishing a "price list" in privates for various ranks. During the American Revolution, the price list worked out between the Americans and the British was typical of most such agreements:

Sergeant =	2 Privates
Ensign =	4 Privates
Lieutenant =	6 Privates
Captain =	16 Privates
Major =	28 Privates
Lieutenant Colonel =	72 Privates
Colonel =	100 Privates
Brigadier General =	200 Privates
Major General =	372 Privates
Lieutenant General =	1044 Privates

Based on this table, one could work out the exchange of any particular group of prisoners by converting everything into "privates." Of course, there were some difficulties. An American regiment or battalion was initially commanded by a colonel, whilst British regiments or battalions were normally headed by a lieutenant colonel, thereby resulting in more American colonels being made prisoner than British and creating a disparity of relative value when it came to calculating the worth of regimental and battalion commanders in terms of privates. Congress resolved this by creating the rank of "lieutenant colonel commandant" for regimental and battalion commanders.

A glance at the relative value in privates of each rank raises some interesting questions. For example, was a lieutenant general really worth 280% of the value of a major general? And why is a lieutenant worth only 50% more than an ensign whilst a captain, on the other hand, is 260% as valuable as the lieutenant?

*Encyclopedia of the American Revolution*

## The Older the Better

War is generally considered a young man's trade. Perhaps; but in the interests of fair play to military senior citizens, we present a random sample of captains who were doing quite nicely in the field (i.e., winning) at age 65 or older. Most of these hoary gents were soldiers, but there are a few old salts as well, and they have been indicated by an asterisk (\*).

NAME	SERVING	WINNING AT
Agesilaos (440-360BC) Killed in action.	Sparta	80
Alva (1508-1583)	Spain	72
Anhalt-Dessault (1676-1747)	Prussia	71
Blucher (1742-1817) Crazy by then, too.	Prussia	72
DeRuyter* (1607-1676)	Netherlands	69
Doria* (1466-1560)	Genoa	89
Howe* (1726-1799)	Britain	68
Kutusov (1745-1813)	Russia	67
MacArthur (1880-1964)	US	70
Mackensen (1849-1944)	Germany	67
Moltke (1800-1891)	Prussia	70
Mondragon (1504-1596)	Spain	73
Montecucoli (1609-1680)	Austria	66
Morosini* (1618-1699)	Venice	75
Narses (478-568) A eunuch yet!	Rome	74
Pizzaro (1471-1541) Killed in combat.	Spain	65
Putnik (1847-1917)	Serbia	68
Radetsky (1766-1885) Might have done it at 100, too!	Austria	84
Rundstedt (1875-1953) Not bad at 70, either.	Germany	66
Suvarov (1729-1800)	Russia	70
Villars (1653-1734)	France	80
Zizka (1360-1434) Blind, too!	Bohemia	70

This list of old timers is by no means complete. FYI will run occasional updates of the list as additional individuals come to our attention. In addition to successful commanders over the age of 65, we are collecting information on Teenage Punks (successful commanders younger than 21, like Alexander the Great), The Gentler Sex (successful female commanders, like Joan of Arc — who is also a Teenage Punk), Late Starters (people who came to the profession of arms late, but successfully, like Cromwell at 43), and the Handicapped (successful commanders with physical disabilities like Zizka's or Narses with his unique condition). Persons interested in assisting in these projects should submit their nominations to FYI.

## THE SQUARE/LINE PROJECT Progress Report

We have been pleased with the response to our request for the readers to submit information concerning instances in which infantry squares were broken by cavalry or in which infantry in line successfully resisted cavalry attacks. Data — which must be as complete as possible and include references — has been coming in slowly, but steadily, and we are beginning to compile what promises to be a very educational table. One reader suggested an additional category which we will probably also begin collecting information about: cases in which infantry successfully attacked cavalry. If you have anything to contribute, and have not done so already, please submit your data to: For Your Information, SPI, 257 Park Avenue South, New York, NY 10010.



# Fighting Sail

## Sea Combat in the Age of Canvas and Shot 1775-1815

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### READ THIS FIRST:

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

### How the Section and Case Numbers Work:

Major Section Number  
 ↓  
 Primary Case Number  
 ↓  
 Secondary Case Number  
 ↓  
**[6.53]**

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

### How to Learn to Play the Game:

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

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

SPI  
 Rules Questions Editor for  
 Fighting Sail  
 257 Park Avenue South  
 New York, N.Y. 10010



**1.0 INTRODUCTION****2.0 GAME EQUIPMENT**

- 2.1 The Game Map
- 2.2 The Playing Pieces
- 2.3 Inventory of Game Parts

**3.0 GLOSSARY****4.0 SEQUENCE OF PLAY**

- 4.1 The Game-Turn
- 4.2 Game-Turn Sequence Outline

**5.0 WIND**

- 5.1 The Map
- 5.2 Sailing

**6.0 COMMANDS**

- 6.1 How Commands are Chosen and Revealed
- 6.2 Command Restrictions

**7.0 MOVEMENT**

- 7.1 How Movement Allowances Are Determined
- 7.2 The Weather Gauge
- 7.3 Ahead, Port, and Starboard Commands
- 7.4 Tack and Wear Commands
- 7.5 How Ships Expend Movement Points
- 7.6 Being Taken Aback
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- 8.2 Drift Due to Failed Commands
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- 9.2 Rates
- 9.3 How Ships Fire

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- 10.2 Rigging Damage
- 10.3 Critical Hits
- 10.4 Dead in the Water

**11.0 MELEE COMBAT**

- 11.1 Fire Combat When Ships Are Fouled
- 11.2 Melee
- 11.3 Unfouling

**12.0 STRIKING COLORS**

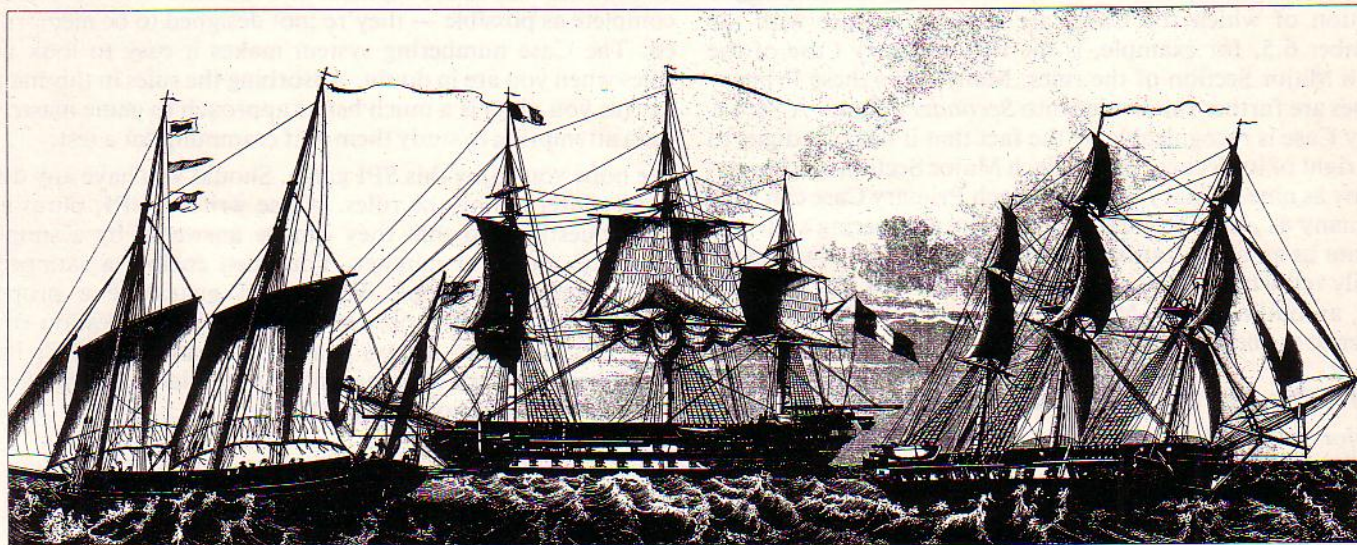
- 12.1 Striking and Abandonment
- 12.2 Prizes
- 12.3 Re-capturing Prizes

**13.0 THE STRATEGIC CYCLE**

- 13.1 Swell
- 13.2 Fires
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- 15.1 "Don't Give up the Ship!"
- 15.2 Wasp vs. Frolic
- 15.3 "Beat to Quarters": Lydia vs. Natividad
- 15.4 "Old Ironsides"
- 15.5 "Old Ironsides" Last Fight
- 15.6 Action Off Venice
- 15.7 "I Have Not Yet Begun to Fight!"
- 15.8 "We Have Met the Enemy and They Are Ours!"
- 15.9 The Battle of Santo Domingo





## [1.0] INTRODUCTION

*Fighting Sail* is a simulation of naval warfare during the age of sail. Nine scenarios are presented in the game, dealing with small-scale naval actions from the American Revolution to the Napoleonic Wars and the War of 1812.

## [2.0] GAME EQUIPMENT

### CASES:

#### [2.1] THE GAME MAP

The map is simply a numbered 22" x 34" square grid, representing an unspecified ocean locale.

#### [2.2] THE PLAYING PIECES

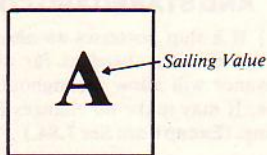
The cardboard counters represent actual ships that participated in the given scenarios. Each counter contains information that is vital to play.

#### [2.21] How to Read the Counters

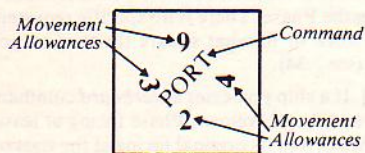
The counter includes forces from various nationalities. Each nationality is portrayed by a color and a two-letter code unique to that force. BR = British; FR = French; US = United States; PA = Panamanian.

#### [2.22] Sample Units

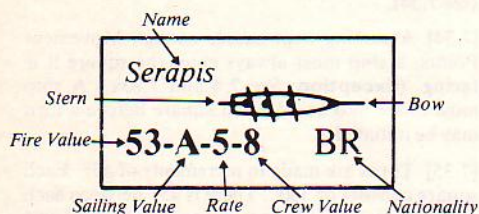
COMMAND CHIT, Front



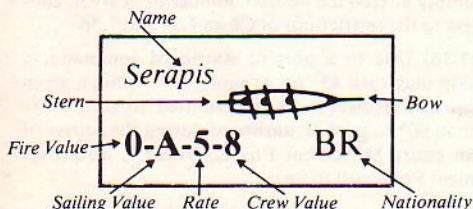
COMMAND CHIT, Back



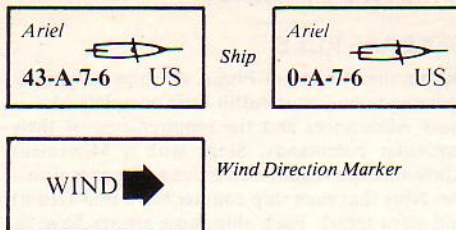
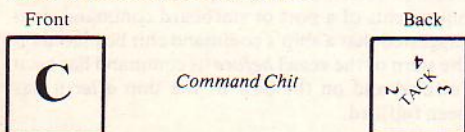
SHIP (BRITISH), Front



SHIP (BRITISH), Back



#### [2.23] Summary of Unit Types



#### [2.3] INVENTORY OF GAME PARTS

Each copy of *Fighting Sail* should include the following components:

One "22 x 34" mapsheet

One sheet of 140 die-cut playing pieces

Two six-sided dice (not included in *S&T* edition)

One game box (not included in *S&T* edition)

If any of these parts are missing or damaged, fill out the Complaint Card enclosed in the game (not in *S&T* edition) and return it to SPI with the appropriate items checked on the card.

Those who have the *S&T* edition of *Fighting Sail* should address their complaints to:

Customer Service  
Simulations Publications, Inc.  
257 Park Avenue South  
New York, New York 10010

Note: The process used in the manufacturing of the die-cut counters used in SPI games sometimes results in colors from one counter overlapping the color of a neighboring counter, or in the slightly off-center printing of the letters and/or numbers on a counter. SPI cannot replace counters displaying these minor manufacturing inaccuracies. Only counters that are illegible can be replaced by SPI.

## [3.0] GLOSSARY

**Command Chit.** A command chit is an order that is secretly issued to each ship by the owning player during the Command Decision Stage. This command may be either ahead, port, starboard, wear, or tack.

**Drift.** A state in which a ship may not move voluntarily nor fire for the duration of the Game-Turn. Drift may be caused by being taken aback or by failing to perform an issued command.

**Fouling.** A state in which two ships (enemy or friendly) occupy the same square. Fouled ships cannot move.

**Rate.** A classification of a ship's strength in terms of weight and guns. The lower the Rate number, the more powerful the ship in question.

**Sailing Value.** A quantification of the relative mobility of a vessel. Ships classified as Sailing Value A are the most mobile, and those classified as Sailing Value C are the least mobile.

**Striking.** Surrendering a ship. Ships that have struck are considered prizes of the enemy player.

**Taken Aback.** A state in which a ship must drift because it is facing directly into the wind.

**Weather Gauge.** An abstract indicator of a position of advantage in relation to the direction of the wind for one player or the other.

## [4.0] SEQUENCE OF PLAY

### CASES:

#### [4.1] THE GAME-TURN

*Fighting Sail* is played in Game-Turns, each of which represents approximately 7½ minutes.

Each Game-Turn comprises several Stages plus a single Cycle that takes place only once every eight Game-Turns.

#### [4.2] GAME-TURN SEQUENCE OUTLINE

Each Game-Turn must proceed strictly according to the following outline.

##### A. STRATEGIC CYCLE

All Game-Turns divisible by 8.

**1. Swell Phase.** Both players determine the effects of swell on their ships that are dead in the water (see 13.1).

**2. Fire Phase.** Both players must determine if their ships that are on fire blow up (see 13.2).

**3. Studding Sail Phase.** Players may deploy or take in studding sails (see 13.3).

##### B. COMMAND DECISION STAGE

Both players secretly issue commands to all of their ships (see 6.0).

##### C. ACTION STAGE

**1. Command Revelation Phase.** Both players reveal all their issued commands.

**2. Movement Allowance Determination Phase.** All ships receive a Movement Allowance (see 5.22).

**3. Weather Gauge Phase.** The player who possesses the Weather Gauge must be determined (see 7.2).

**4. Movement Phase.** According to the whim of the player with the Weather Gauge, each ship's Movement Allowance is expended to the fullest extent possible (see 7.5).

##### D. MELEE STAGE

**1. Fire Phase.** Fouled ships may perform fire combat against one another (see 11.1).

**2. Melee Phase.** Melee combat takes place between enemy ships fouled together (see 11.2).

##### E. UNFOULING STAGE

Fouled ships may attempt to unfoul (see 11.3).

##### F. TERMINAL STAGE

All ships on the map should be flipped to their front countersides (see 9.13). The Game-Turn is ended, and a new Game-Turn is begun.

## [5.0] WIND

### GENERAL RULE:

The relationship between a ship's heading and the direction in which the wind is blowing determines this vessel's Movement Allowance throughout a given Game-Turn. (see 5.2).

### CASES:

#### [5.1] THE MAP

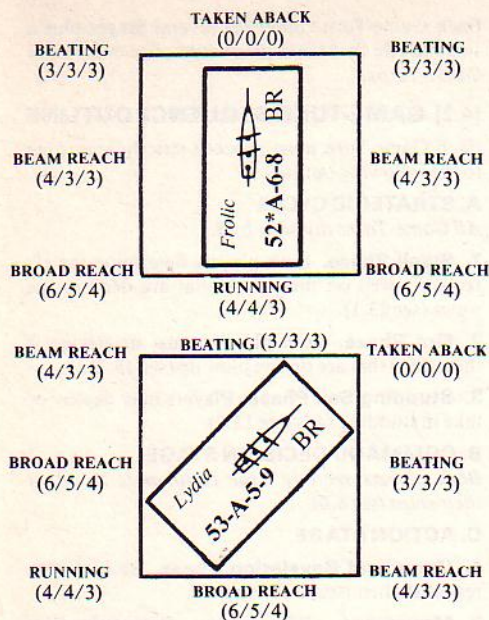
The game map is divided into squares. There are eight possible directions in which the wind may blow (or a ship may face): through any of the four square sides or through any of the four square angles.

#### [5.2] SAILING

[5.21] Each ship possess a Sailing Value: either A (fastest), B, or C (slowest).

[5.22] Depending on its orientation in relation to the wind direction, a ship receives a given Movement Allowance that it may use throughout the remainder of the Game-Turn. There are five possible positions of a ship relative to the wind (see display on next page). In order to determine a ship's Movement Allowance in a given Game-Turn, its orientation in relation to wind direction must be determined while checking its Sailing Value.





Example: A ship possessing a Sailing Value of A that is broad reaching would have a Movement Allowance of 6. In the same position, a Sailing Value B ship would have a Movement Allowance of 5, and a Sailing Value C ship would have a Movement Allowance of 4.

## [6.0] COMMANDS

### GENERAL RULE:

The method by which each ship fulfills its calculated Movement Allowance is determined by *commands*. Commands are issued to each ship *secretly* by the owning player in the Command Decision Stage. Each command requires a given ship to fulfill certain actions in the Movement Phase.

### CASES:

#### [6.1] HOW COMMANDS ARE CHOSEN AND REVEALED

During the Command Decision Stage, both players must place a command chit on each of their ships that is neither fouled (see 11.0), nor dead in the water (see 10.4), nor taken aback (see 5.22). Chits are placed on ships *upside down* so the enemy player is not aware of their meanings.

[6.11] There is a separate pool of command chits for each Sailing Value of ships: **A**, **B**, and **C**. A ship may only receive a command chit that bears the same letter as the Sailing Value of the ship in question.

[6.12] There are five available commands that may be issued to a ship: ahead (**A**), port (**P**) [left], starboard (**S**) [right], wear (**W**), or tack (**T**).

[6.13] Only a single command may be issued per ship in each Command Decision Stage.

[6.14] In the Command Revelation Phase, all issued commands are revealed to both players by flipping the command chits over.

#### [6.2] COMMAND RESTRICTIONS

[6.21] If a ship has received a *wheel* critical hit (see 10.32), it is necessary to determine if its issued command *succeeds* or *fails* as soon as it is revealed in the Command Revelation Phase.

[6.22] Each ship possesses a Crew Value (see 10.12). A ship may not be issued a tack command if its current Crew Value is **5** or less. A ship may not be issued a wear command if its current Crew Value is **4** or less.

## [7.0] MOVEMENT

### GENERAL RULE:

During the Movement Phase, all ships possessing command chits must fulfill their complete Movement Allowances and the requirements of their particular commands. Ships with a Movement Allowance are *required* to move as far as is possible. Note that each ship counter has a bow (front) and stern (rear). Each ship must always have its bow oriented toward one of eight directions: toward one of either the sides or angles.

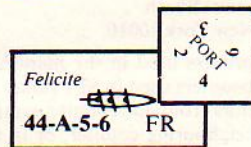
### PROCEDURE:

During the Movement Phase, ships are moved one at a time according to the whim of the player who possesses the *Weather Gauge*.

### CASES:

#### [7.1] HOW MOVEMENT ALLOWANCES ARE DETERMINED

During the Movement Allowance Determination Phase, each ship that has been issued a command must have a Movement Allowance determined for it according to the instructions of Case 5.22. When this allowance has been determined, the ship's command chit should be oriented such that the proper numeral on this chit is facing toward the bow of the vessel.



*Felicite* is broad reaching with a port command. Since *Felicite* is sailing Value A, its Movement Allowance is 6 (see 5.22). Thus, the numeral 6 is oriented to face the bow of the ship.

#### [7.2] THE WEATHER GAUGE

During the Weather Gauge Phase, the player who possesses the Weather Gauge must be determined. The player who possesses the Weather Gauge controls it for the duration of the Game-Turn.

[7.21] The Weather Gauge is determined as follows:

a. The players examine the Movement Allowance of the ships on the map, determining the *highest* allowance that appears (even if it is shared among many ships).

b. Each player determines how many (if any) of his ships possess this highest Movement Allowance as calculated in Step a.

c. The player who has the most ships on the map possessing this allowance is considered to possess the Weather Gauge. If both players have the same number of ships with this allowance, they both roll a single die, higher die roll indicating the possession of the Weather Gauge.

[7.22] The player with the Weather Gauge controls the order of movement of *all* ships possessing commands. This player must declare which player (either himself or his opponent) will perform a move with one of his ships in the following circumstances:

- At the beginning of the Movement Phase.
- After any enemy or friendly ship has expended Movement Points to enter a new square as a result of a command.
- After any enemy or friendly ship has tacked.

[7.23] When the player with the Weather Gauge has stated which player will make the next move, the indicated player must perform the movement of one ship of his own choice. After this movement

is completed, the Weather Gauge player is obligated to declare which player will make the next move (see 7.22). This process continues until there are no more ships on the map with uncompleted command chits. (If one player has completed the movement of all his ships, the enemy player completes the movement of all his ships without restriction.)

[7.24] *Optional, suitable for scenarios consisting of 7 or more ships.* A player must move ships that possess the highest Movement Allowance on the map before moving ships with lower Movement Allowances. The player with the Weather Gauge must comply with this restriction when declaring who will perform the next move (see 7.22).

**Weather Gauge Example:** *HMS Guerriere* is beam reaching with a Movement Allowance of 4. *USS Constitution* is beating with an Allowance of 3. Thus, *Guerriere* possesses the Weather Gauge. The British player decides to commence the Movement Phase by moving *Guerriere* one square, reducing its Movement Allowance to 2. He then declares that the US player should make the next move. This is performed, completing *Constitution's* command. Then, *Guerriere* completes the Movement Phase by fulfilling its command.

[7.25] The Movement Phase is completed when all ships on the map have completed their movement and their command chits have been removed.

#### [7.3] AHEAD, PORT, AND STARBOARD COMMANDS

[7.31] If a ship possesses an *ahead* command, it must go directly ahead as far as its Movement Allowance will allow throughout the Movement Phase. It may make no changes of facing as it is moving. (**Exception:** See 7.84.)

[7.32] If a ship possesses a *port* command, it must end the Movement Phase facing at least 45° counterclockwise its original facing at the start of the Phase. It may never make a turn to starboard during the Phase. There is no specific requirement as to *when* or in what square the turn to port is made (see 7.34).

[7.33] If a ship possesses a *starboard* command, it must end the Movement Phase facing at least 45° clockwise from its original facing at the start of the Phase. There is no specific requirement as to *when* or in what square that turn to starboard is made (see 7.34).

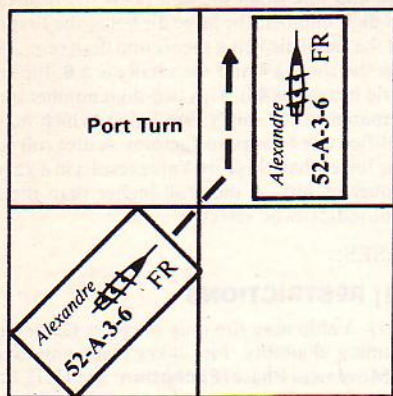
[7.34] Assuming it possesses enough Movement Points, a ship must always enter the square it is facing. (**Exception:** See 7.4 and 7.83a.) A ship must move into an adjacent square before a turn may be initiated.

[7.35] Turns are made in increments of 45°. Each square consists of 360°. There is 45° between each square-side and adjacent square-angle, and 90° between adjacent square sides and between adjacent square angles. In order to turn, a ship's bow is simply altered the desired number of degrees, subject to the restrictions of Cases 7.34 and 7.36.

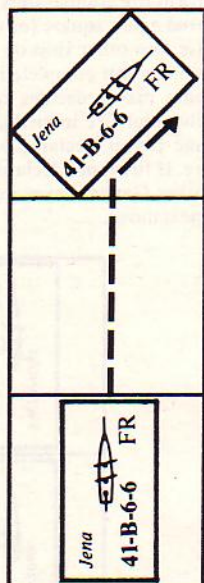
[7.36] Due to a port or starboard command, a ship may turn 45° or, at most, 90° within a given square. (However, it is permitted to turn more than 90° to port or starboard during the course of an entire Movement Phase.) There is *no* Movement Point cost to turn.

[7.37] Since a ship may be moved at different times during the Movement Phase, it may be difficult to remember if a ship has fulfilled the requirements of a port or starboard command. It is suggested that a ship's command chit be placed on the stern of the vessel *before* its command has been fulfilled and on the bow of the ship *after* it has been fulfilled.

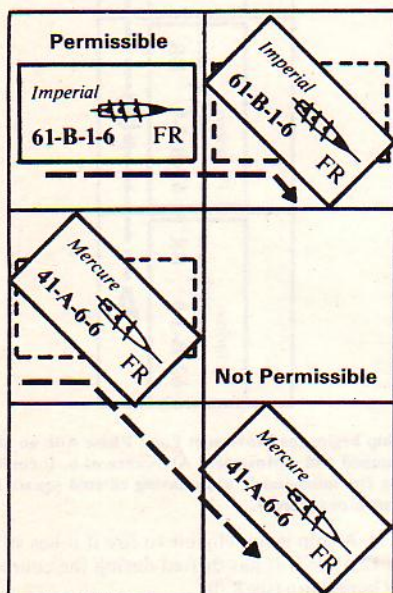




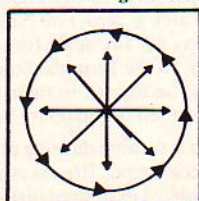
Port Turn



Starboard Turn

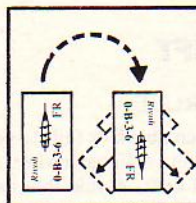


Note that each turning increment is 45°.

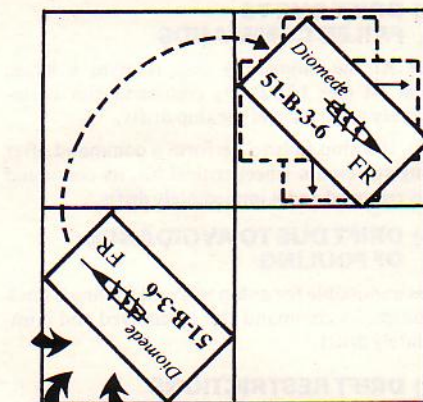
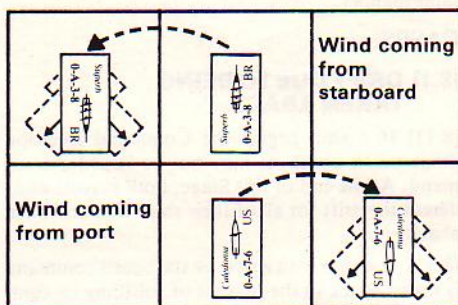


## [7.4] TACK AND WEAR COMMANDS

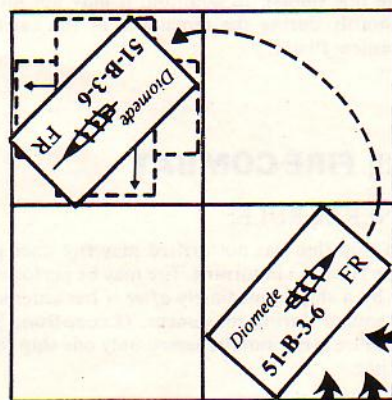
[7.41] If a ship possesses a *tack* command, it must expend its entire Movement Allowance to turn 135°, 180°, or 225° in the square it occupies. (Exception: See 7.43.)



[7.42] If a ship possesses a *wear* command, it must expend its entire Movement Allowance to turn 135°, 180°, or 225° one square to *leeward* (i.e., away from the wind; see accompanying display). (Exception: See 7.43.) When performing a wear command, a ship never transits any intervening squares; it is simply picked up and placed with its desired directional change in its proper square. (Also, see 7.44.)



Wind coming from port



Wind coming from starboard

[7.43] A ship may never complete a tack or wear command by being taken aback (that is, by facing directly into the wind).

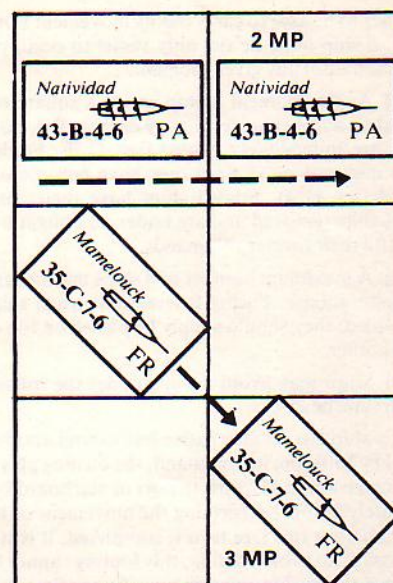
[7.44] If a ship with a wear command is running (i.e., with the wind from directly astern), it may complete its command by turning 135° or 225° either in the square *directly* to port or in the square *directly* to starboard.

## [7.5] HOW SHIPS EXPEND MOVEMENT POINTS

[7.51] During a Movement Phase, a ship's Movement Allowance must be expended to the fullest extent possible.

[7.52] A ship always enters the square it is facing when moving. (Exception: See 7.4.) As it enters this new square, the Movements Points required to perform this move are immediately deducted from the ship's current Movement Allowance by re-orienting its command chit such that the numeral representing its new Movement Allowance is facing the bow (see 7.53).

[7.53] To enter an adjacent square through a square side costs 2 Movement Points. To enter an adjacent square through a square angle costs 3 Movement Points.



[7.54] In order to enter an adjacent square, a ship must have enough Movement Points remaining in its allowance. If a ship does not have enough Movement Points to enter the square it faces, its command chit is removed and its movement for the Phase is terminated. If any ship has fewer than 2 Movement Points remaining, its command chit is automatically removed (it could not possibly enter an adjacent square).

[7.55] Movement Points may never be loaned from ship to ship, nor may they be accumulated from Phase to Phase.

## [7.6] BEING TAKEN ABACK

A ship is considered to be taken aback when it is facing directly into the wind (see 5.22).

[7.61] A ship that begins the Command Decision Stage taken aback may not be issued a command. Instead, it must drift (see 8.0).

[7.62] If at any point during the fulfillment of a port or starboard command a ship is taken aback, its command chit is immediately removed and its movement is terminated for the current Phase. In addition, the ship must drift (see 8.0). Such a ship would no longer be required to fulfill the requirements of its command.



[7.63] A ship with a tack command may turn "through" the wind so long as the vessel does not complete its command by being taken aback.

### [7.7] BACKING SAIL

[7.71] If a ship that possesses a command chit begins the Movement Phase beating or beam reaching (see 5.22), the owning player may declare that he is backing sail instead of moving. To back sail, the owning player simply removes the ship's command chit and leaves his vessel positioned in the same square it occupied at the beginning of the Movement Phase with the *same* bow orientation (in other words, the ship is not moved at all). The ship is under no obligation to fulfill its given command chit.

[7.72] Backing sail is considered normal movement even though no physical movement takes place. After backing sail is performed, the player with the Weather Gauge must state who will make the next move normally (see 7.2).

[7.73] After a ship backs sail, it is eligible to fire (see 9.0).

[7.74] A ship may *never* back sail in two consecutive Movement Phases.

### [7.8] FOULING

In order to be able to carry out its movement functions, a ship must be the only vessel to occupy a given square at any given moment.

[7.81] At the moment a ship enters a square occupied by another vessel (enemy or friendly), both ships are immediately *fouled* (see 11.0). Fouled ships may not move until they have become unfouled (see 11.4). Fouled ships have their command chits removed and are under no obligations to fulfill their former commands.

[7.82] A maximum number of 4 ships may occupy the same square. Facing is irrelevant when ships are fouled; they should simply be placed on top of one another.

[7.83] Ships may avoid fouling under the following circumstances:

a. If a ship has no alternative but to foul another vessel by fulfilling its command, the owning player may make a *free* 45° turn to port or starboard immediately before performing the movement of his ship. If, after this free turn is completed, it is still impossible to avoid fouling, this fouling cannot be avoided if the ship must move. (**Exception:** See 7.83b.)

b. If it is impossible for a ship to avoid fouling with a stack of 4 ships, the vessel immediately drifts (see 8.0).

[7.84] Ships with port or starboard commands that are performing free turns to avoid fouling may make this free turn in *any* direction, regardless of the ship's original command.

[7.85] If a ship makes a free turn and, as a result, is taken aback, it immediately drifts (see 8.0) and its movement is terminated for the remainder of the Phase.

### [7.9] HEAVING TO

[7.91] If a ship that possesses a command chit begins the Movement Phase beating (see 5.22), the owning player may declare that he is heaving to instead of moving. To heave to, the owning player simply re-orientates the bow of his ship 45° to port (if the wind is coming from the ship's starboard side) or 45° to starboard (if the wind is coming from the ship's port side). The ship remains in the square it occupied at the start of the Movement Phase and its command chit is removed.

[7.92] Heaving to is considered normal movement, even though the ship does not enter a new square. After heaving to is performed, the player

with the Weather Gauge must state who will make the next move normally (see 7.2).

[7.93] After a ship heaves to, it is eligible to fire (see 9.0).

## [8.0] DRIFT

### GENERAL RULE:

If a ship is taken aback or fails to perform a command after having suffered a wheel critical hit (see 10.32), it must drift. A ship that has drifted may not move voluntarily for the remainder of the Game-Turn, nor may it perform fire combat.

### PROCEDURE:

When a ship drifts, the owning player must immediately roll a single die in order to determine the direction of drift. If a 1 or 2 is rolled, the ship is unaffected and remains oriented as before. If a 3 or 4 is rolled, the ship's bow is reoriented 45° to port in the same square. If a 5 or 6 is rolled, the ship's bow is reoriented 45° to starboard in the same manner.

### CASES:

#### [8.1] DRIFT DUE TO BEING TAKEN ABACK

[8.11] If a ship begins the Command Decision Stage taken aback, it may not be issued a command. At the end of this Stage, both players must determine drift for all of their ships that are taken aback.

[8.12] If a ship with a port or starboard command is taken aback in the process of fulfilling its command, its command chit is immediately removed and the ship drifts.

#### [8.2] DRIFT DUE TO FAILED COMMANDS

[8.21] At the moment a ship receives a wheel critical hit (see 10.32), its command chit is immediately removed and the ship drifts.

[8.22] If a ship fails to perform a command after having suffered a wheel critical hit, its command chit is removed and it immediately drifts.

#### [8.3] DRIFT DUE TO AVOIDANCE OF FOULING

If it is impossible for a ship to avoid fouling a stack of 4 ships, its command chit is removed and it immediately drifts.

#### [8.4] DRIFT RESTRICTIONS

A ship that drifts may not fire for the remainder of the Game-Turn (it should be flipped over to indicate this status). In addition, it may not move voluntarily during the remainder of the current Movement Phase.

## [9.0] FIRE COMBAT

### GENERAL RULE:

Each ship that has not drifted may fire once per Game-Turn. As in turning, fire may be performed only by a ship immediately *after* it has entered a new square during movement. (**Exception:** See 11.1.) Fire is not simultaneous; only one ship fires at a time.

### PROCEDURE:

When a ship fires, the owning player must declare a target and verify that this target is within range,

field of fire, and line of sight. He then rolls one large and one small die and reads the result as a two-digit number, the large die being the first digit and the small die being the second digit (e.g., if the large die show a 4 and the small die a 6, the result would be read as 46). This two-digit number is then compared to the ship's Fire Value (which may be modified due to various factors). A dice roll equal to or lower than this Fire Value results in a varying number of hits. A dice roll higher than the Fire Value indicates no effect.

### CASES:

#### [9.1] RESTRICTIONS

[9.11] A ship may fire only *once* per Game-Turn, assuming eligibility. Fire takes place only during the Movement Phase (**Exception:** See 11.1), and is completely voluntary. As in turning, a ship may perform fire combat only immediately after it has entered a new square (or tacked) in the Movement Phase. No other ship on the map except the one which has just completed a move may fire. If the owning player decides to initiate fire, he must resolve that fire immediately *before* the Weather Gauge player declares who will make the next move. If fire is not declared (or is not possible), the Weather Gauge player must state who will make the next move.



A ship begins the Movement Point Phase with an ahead command and a Movement Allowance of 6. It could initiate fire immediately after having entered square B or square C or square D.

[9.12] A ship is not eligible to fire if it has struck (see 12.1) or if it has drifted during the course of the Game-Turn (see 8.0).

[9.13] As soon as a ship resolves a fire attack, it should be flipped over to its reverse counterside. This side indicates a *zero* Fire Value, indicating that the ship may not fire again for the duration of the Game-Turn. In the Terminal Stage, all ships on the map should be flipped to their front countersides, indicating their original Fire Values.

[9.14] If a ship is turning due to a port, starboard, wear, or tack command, fire takes place after the vessel has completed its desired turn.

[continued on page 31]



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[continued from page 26]

[9.15] A ship may fire only its port or starboard broadside in a given Game-Turn, not both.

[9.16] At 6 or fewer Range Points (see 9.31), a firing ship may choose any enemy ship as its target. At 7 or more Range Points, a firing ship must attempt to choose an enemy target ship that possesses a Rate number (see 9.2) equal to or less than its own if at all possible. If this is impossible, any enemy target ship within this range may be chosen as a target.

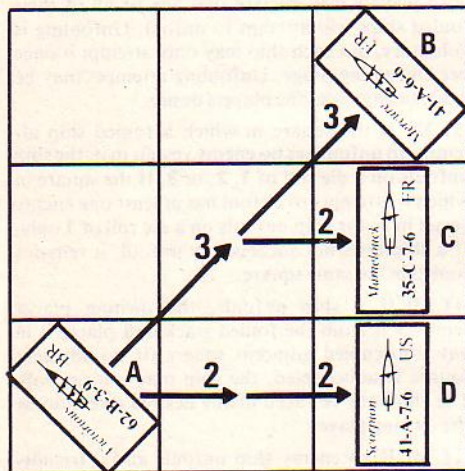
## [9.2] RATES

Each ship possesses a Rate, which is an indicator of the size and number and caliber of the guns she carries on board. The lower the Rate number, the bigger the ship.

## [9.3] HOW SHIPS FIRE

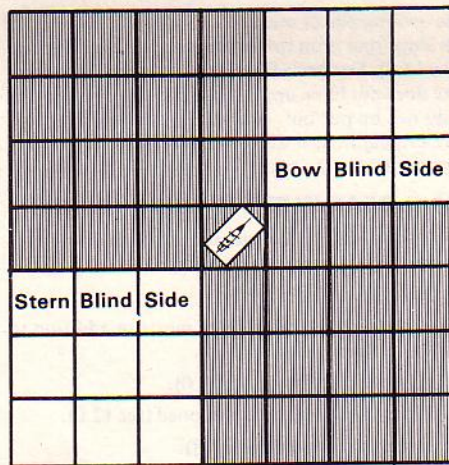
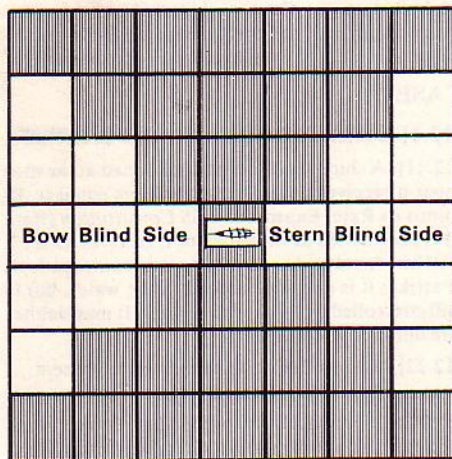
[9.31] When a ship fires, it must fire at a single enemy target ship that is within range, field of fire, and line of sight.

**a. Range.** The maximum range of all fire is 20 Range Points. Range Points are identical to Movement Points. They are traced across square sides (2 Range Points) and square angles (3 Range Points) from firing to target ship exactly as if movement were being performed.

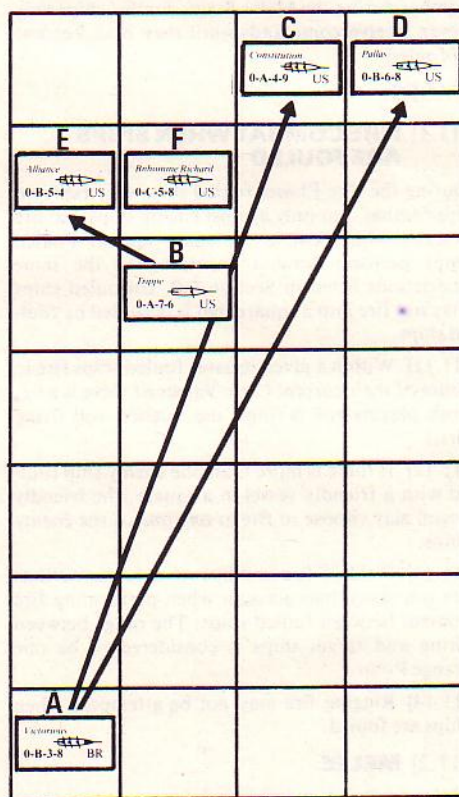


The range from Ship A to Ship B is 6 Range Points, from Ship A to Ship C is 5 Range Points, and from Ship A to Ship D is 4 Range Points.

**b. Field of Fire.** Each ship has a field of fire for both its port and its starboard broadside. No target may ever be fired at outside this field. In the following displays, all shaded squares are within the fields of fire of the indicated ships (note that the field extends hypothetically beyond the scope of the displays).



**c. Line of Sight.** The firing player must connect the center of the square occupied by the firing ship with the center of the square occupied by the target ship by using a straightedge. If this line passes through any square that is occupied by a friendly or enemy ship, no fire may take place. If the line does not pass through any occupied squares, fire may take place. (Note: A line of sight is not blocked if it passes directly through a square angle of an occupied square.)



Ship A may not fire at Ship C because it is blocked by Ship B. However, it may fire at Ship D. Ship B may fire at Ship E, because its line of sight passes directly through the angle of the square occupied by Ship F.

[9.32] When a fire attack is declared, it must be specified as hull or rigging fire.

[9.33] When calculating a fire attack, the firing ship's Fire Value is modified according to the following schedule:

**a. Rates.** The Rate of the firing ship is subtracted from the Rate of the target ship. If the result is zero, there is no modification. If the result is a positive number, it is multiplied by 10, the product

indicating the amount that is added to the firing ship's Fire Value. If the result is a negative number, this number is also multiplied by 10, the product indicating the amount that is subtracted from the firing ship's Fire Value.

**b. Range.** The number of Range Points from firing to target ship is divided by 4 (drop fractions). The result is multiplied by 10, the product indicating the amount that is subtracted from the firing ship's Fire Value.

**c. Damage.** The number of hull hits inflicted on the firing ship is divided by 2 (drop fractions). The result is multiplied by 10, the product indicating the amount that is subtracted from the firing ship's Fire Value.

**d. Rigging Fire.** If rigging fire is being attempted (see 9.32), 10 is subtracted from the firing ship's Fire Value, if this fire is being attempted at 6 Range Points or fewer.

**e. Tacking.** If the firing ship has just performed a tack command, 10 is subtracted from the firing ship's Fire Value.

**f. Rakes.** If the firing ship is performing a stern rake on the target (see 9.35), 20 is added to its Fire Value. If it is performing a bow rake, 10 is added to its Value.

**g. First Broadside.** If the firing ship is performing its first broadside (see 9.36) at 3 Range Points or fewer, 20 is added to its Fire Value. If the first broadside is performed at between 4 and 6 Range Points (inclusive), 10 is added to its Fire Value.

[9.34] After a firing ship's final Fire Value has been determined, the owning player rolls one large and one small die, reading a two-digit result (see Procedure). This result is compared to the firing ship's final Fire Value. A result greater than this Value indicates *no effect*. A result equal to or up to 40 less than this Value indicates *one hit* on the target ship. A result between 41 and 80 (inclusive) less than this Value indicates *two hits* on the target ship. A result of 81 or more less than this Value indicates *three hits* on the target ship. Note that on any doubles dice roll that also results in at least one hit, a *critical hit* (see 10.3) is inflicted on the target.

[9.35] A stern rake occurs when the firing ship is in the stern blind-side area of the target ship (see 9.31b). A bow rake occurs when the firing ship is in the bow blind-side area of the target ship.

[9.36] All ships possess a field of fire ("broadside") to their port and to their starboard sides. The first time a ship's port or starboard broadside is fired, the firing player is obligated to record this fact on a separate sheet of paper (see 14.0). If this first broadside is delivered at 7 or more Range Points, it has no beneficial effect on the firing ship's Fire Value and is considered wasted. However, if it is delivered at 6 or fewer Range Points, it adds to the firing ship's Fire Value (see 9.33g). No more than one port and one starboard broadside may be delivered by a ship in any one game.

[9.37] A ship may not fire *both* its port and starboard broadsides in the same Game-Turn.

[9.38] All ships whose Fire Values are followed by an asterisk are *carronade-armed*. Such ships have a maximum range of 8 Range Points. At ranges of 3 Range Points or fewer, 10 is automatically added to these ships' Fire Values.

**Example of Fire Combat: HMS Shannon** (Fire Value 55, Rate 5) is firing at *USS Constitution* (Rate 4) at 6 Range Points. This is *Shannon's* first port broadside, and the fire is determined to be a stern rake. Hull fire is declared. 10 is subtracted due to the difference in Rates between the two ships, and an additional 10 is lost due to the range. However, the first port broadside adds 10, while the stern rake adds 20, yielding a final Fire Value



of 65 for *Shannon*. The British player rolls two dice and obtains a **15** result. Since this is **50** less than *Shannon's* Fire Value, two hull hits are inflicted on *Constitution*.

## [10.0] DAMAGE

### GENERAL RULE:

A ship may suffer either hull or rigging damage due to successful enemy fire. In addition, in some circumstances, a ship may suffer a *critical hit*. Whenever a hull, rigging, or critical hit is inflicted on a ship, the owning player must record this fact on a piece of scrap paper (see 14.0).

### CASES:

#### [10.1] HULL DAMAGE

All hits caused by hull fire are considered hull hits. Hull hits may never be repaired.

[10.11] The number of hull hits a ship possesses may affect its Fire Value (see 9.33c).

[10.12] For every hull hit a ship possesses, its Crew Value is reduced by one.

[10.13] A variable number of hull hits may cause a ship to strike (see 12.1).

#### [10.2] RIGGING DAMAGE

All hits caused by rigging fire are considered rigging hits. Rigging hits may never be repaired. If a ship has received at least two rigging hits, its maximum Movement Allowance is **4**, regardless of its Sailing Value. If it has received at least four rigging hits, its maximum Movement Allowance is **3**, regardless of its Sailing Value.

#### [10.3] CRITICAL HITS

During fire combat, any doubles dice roll that also results in a hit indicates a critical hit on the target vessel in addition to its normal damage. The firing player immediately rolls a single die. On a die roll of **1, 2, or 3**, a wheel critical hit is inflicted (see 10.32). On a die roll of **4 or 5**, a mast critical hit is inflicted (see 10.31). On a die roll of **6**, the die is rolled again. A roll of **1, 2, or 3** on this subsequent die roll indicates a mast critical hit. A **4, 5, or 6** indicates a fire critical hit (see 10.33).

[10.31] A mast critical hit indicates the loss of a mast. A given ship may lose no more than three masts (further mast critical hits after this point are converted to *no effect*). If a ship has lost one mast, its maximum Movement Allowance is **4** if Sailing Value **A** or **B**, or **3** if Sailing Value **C**. If a ship has lost two masts, its maximum Movement Allowance is **3**, regardless of Sailing Value. If a ship has lost three masts, it is considered dead in the water (see 10.4). **Note:** If a ship has lost any number of masts in addition to possessing two or more rigging hits (see 10.2), it is dead in the water.

[10.32] At the moment a wheel critical hit is received, the target ship has its command chit (if any) removed and it immediately drifts (see 8.0). In addition, at the end of every Command Decision Stage, the owning player must roll a single die for each of his ships that have been issued commands that possess a wheel critical hit. On a die roll that is *greater* than the current Crew Value of such a ship, the ship's command chit is immediately removed and the ship drifts (see 8.0). On a die roll equal to or less than the Crew Value, the command "succeeds" and the ship is unaffected. **Note:** If a ship receives a wheel critical hit after having received one earlier in the game, it is converted to a mast critical hit.

[10.33] If a ship receives a fire critical hit, one hull hit (see 10.1) is immediately inflicted on it. In addition, during the Fire Phase of the Strategic Cycle,

the owning player must roll a single die for each of his ships that is on fire in order to see if it blows up (see 13.2). For each Fire Phase in which a ship on fire does not blow up, it receives one hull hit. Fires may not be put out. **Note:** If a ship receives two fire critical hits, it automatically blows up and is removed from the map.

#### [10.4] DEAD IN THE WATER

[10.41] A ship is considered dead in the water under the following circumstances:

- It has lost three masts.
- It has lost any number of masts in addition to two or more rigging hits.
- If the ship is a prize (see 12.0).
- If the ship has been abandoned (see 12.0).
- If the ship is fouled (see 7.8).

[10.42] Ships that are dead in the water may not receive commands, nor may they move voluntarily. During the Strategic Cycle, ships that are dead in the water may be affected by swell (see 13.1).

## [11.0] MELEE COMBAT

### GENERAL RULE:

Fouled ships (see 7.8) may participate in melee combat during the Melee Stage. Fouled ships may never receive commands until they have become unfouled.

### CASES:

#### [11.1] FIRE COMBAT WHEN SHIPS ARE FOULED

During the Fire Phase, fouled ships may perform fire combat, but only against enemy ships that are stacked with them in the same square. Fouled ships perform combat according to the same restrictions listed in Section 9.0. Unfouled ships may *not* fire into a square that is occupied by fouled ships.

[11.11] Within a given square, fouled ships fire in order of their current Crew Values (if there is a tie, both players roll a single die, highest roll firing first).

[11.12] If there is more than one enemy ship fouled with a friendly vessel in a square, the friendly vessel may choose to fire at *any one* of the enemy ships.

[11.13] Field of fire and line of sight restrictions are not taken into account when performing fire combat between fouled ships. The range between firing and target ships is considered to be one Range Point.

[11.14] Rigging fire may not be attempted when ships are fouled.

#### [11.2] MELEE

Melee combat is mandatory between enemy ships that occupy the same square during the Melee Phase.

[11.21] Melee combat is performed according to the following procedure:

- Both players determine the Boarding Values (see 11.22) of their fouled ships. If a player has more than one ship in the square, the Boarding Values are added to produce a single sum. (**Exception:** See 11.23.)
- Both players roll a single die and add this die roll to their Boarding Value as determined in Step a. **Note:** If the Boarding Value is a negative number, that number is *subtracted* from this die roll.

c. The sums of both players are compared. If one sum is larger than the other by 150% or more, the player with the higher sum has taken *all* enemy ships in the square as *prizes* (see 12.2). If one sum does not exceed the other by 150%, melee has had no effect (although melee may take place in ensuing Melee Phases). The ships remain fouled and are considered dead in the water. **Note:** If one player's sum is zero or a negative number and the other player's sum is positive, then all of the first player's ships in the square become prizes. If both players have a negative sum (or zero), then melee has had no effect.

[11.22] A ship's Boarding Value is equal to its current Crew Value minus its Rate. This may be a positive or negative number or zero.

[11.23] If *all* of a player's ships that are performing melee combat within the same square have a negative Boarding Value, then only the *highest* of these Boarding Values is considered for melee resolution.

#### [11.3] UNFOULING

Fouled ships must remain stacked in the same square until they *unfoul* during the Unfouling Stage (even if all the fouled ships are friendly).

[11.31] At the beginning of the Unfouling Stage, both players may declare that any or all of their fouled ships will attempt to unfoul. Unfouling is voluntary, but each ship may only attempt it once per Unfouling Stage. Unfouling attempts may be made in any order the players desire.

[11.32] If the square in which a fouled ship attempts to unfoul has no enemy vessels in it, the ship unfouls on a die roll of **1, 2, or 3**. If the square in which it attempts to unfoul has at least one enemy vessel in it, the ship unfouls on a die roll of **1** only. If a ship does not successfully unfoul, it remains fouled in the same square.

[11.33] If a ship unfouls, the owning player removes it from the fouled stack and places it in *any* unoccupied adjacent square (if no adjacent square is unoccupied, the ship may not unfoul). The ship may be faced in any desired direction by the owning player.

[11.34] If an enemy ship unfouls and a friendly ship finds itself alone in a square it formerly occupied with this enemy vessel, the friendly ship may be freely adjusted by the owning player to face any desired direction.

## [12.0] STRIKING COLORS

### GENERAL RULE:

Ships may be obligated to strike colors (surrender) as a result of melee combat or due to certain levels of hull damage. Once a ship strikes, it is considered a prize of the enemy player. A prize is considered friendly to the player who has captured it.

### CASES:

#### [12.1] STRIKING AND ABANDONMENT

[12.11] A ship is considered abandoned at the moment it receives a number of hull hits equal to **10** minus its Rate. **Example:** *USS Constitution* (Rate **4**) is abandoned at the moment it receives its sixth hull hit. An abandoned ship does not automatically strike; it is considered dead in the water, but is still controlled by its original owner. It may neither fire nor receive commands.

[12.12] Rigging fire never causes abandonment.

[12.13] An abandoned ship automatically strikes if at the moment it is abandoned an enemy vessel occupies the same square or any adjacent square.



[12.14] An abandoned ship automatically strikes at the moment an enemy ship *enters* any of the eight adjacent squares.

[12.15] Note that a ship may also strike and be taken as a prize through melee combat (see 11.2).

### [12.2] PRIZES

If a ship strikes (see 12.13 and 12.14), it is immediately considered a prize of the enemy player. Prizes are owned by the player who has captured them, although they may never fire nor receive commands.

[12.21] All prizes have a Crew Value of 1 and maintain their original Rate.

[12.22] If a ship is taken as a prize during melee combat, it is still considered fouled with the ships that captured it. If the owning player desires it, these ships may attempt to unfoul normally (see 11.3), although they are considered friendly to one another.

[12.23] Prizes may never be chosen as targets of fire combat.

### [12.3] RE-CAPTURING PRIZES

[12.31] A prize may be re-captured by its original owner, but *only* through melee combat. This combat is performed normally (see 12.21), and if the original owner obligates the prize to strike (see 11.2), it reverts back to his control. Prizes may be captured and re-captured an unlimited number of times.

[12.32] A re-captured prize is considered a prize itself — that is, it automatically has a Crew Value of 1 and maintains its original Rate.

## [13.0] THE STRATEGIC CYCLE

### GENERAL RULE:

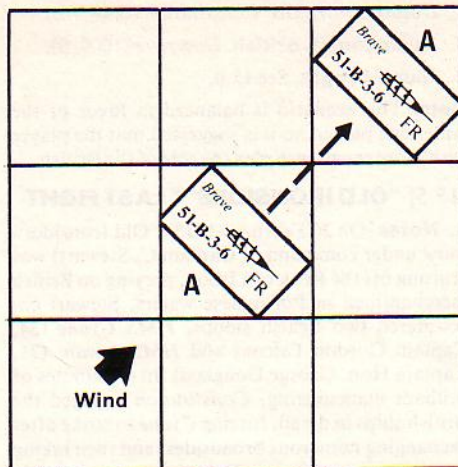
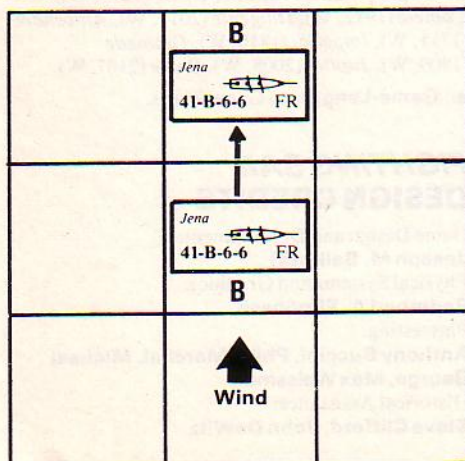
The Strategic Cycle occurs on all Game-Turns that are divisible by 8 (i.e., every *hour* of real time). On all other Game-Turns, this Cycle is skipped.

### CASES:

#### [13.1] SWELL

Only ships that are dead in the water (see 10.4) are affected by swell.

[13.11] During the Swell Phase, each player rolls a single die for each of his ships that is dead in the water. (**Exception:** See 13.12.) A die roll of 1 or 2 indicates *no effect*; the ship remains in the hex it occupies. A result of 3, 4, 5, or 6 indicates that the ship is immediately moved one square to *leeward*, maintaining the same facing. This means that the ship is moved into the adjacent square toward which the wind is blowing *directly*.



Ships A and B are both dead in the water and have been affected by swell. Thus, during the Swell Phase, they are moved by the owning player as shown.

[13.12] If, at the beginning of the Swell Phase, the adjacent leeward square of a ship that is dead in the water is currently occupied by a friendly or enemy ship, the player owning the ship that is dead in the water is not obligated to roll the die in order to determine the effects of swell; it is exempt from the restrictions of Case 13.11.

[13.13] During the Swell Phase, ships that are fouled are not rolled for individually. Instead, either player rolls a single die at this time in order to determine the effects of swell on *all* of the fouled ships within a square.

#### [13.2] FIRES

[13.21] During the Fire Phase, a player must roll a single die for each of his ships that is on fire (see 10.33). On a die roll of 1, the ship blows up and is removed from the map immediately. On any other die roll, the ship simply receives one hull hit.

[13.22] If the addition of one hull hit to a ship on fire (see 13.21) reduces that ship to abandonment level (see 12.11), the ship immediately blows up and is removed from the map.

[13.23] The only way a ship can sink (and thus be removed from the map) is through fire (see 10.33, 13.21, and 13.22).

[13.24] All vessels that are fouled with a ship that blows up are considered blown up as well.

#### [13.3] STUDDING SAILS

[13.31] During the Studding Sail Phase, each player may declare that any of his ships on the map will employ studding sails for the next eight Game-Turns. If studding sails are employed by a ship, the owning player must record this fact on a separate sheet of paper. In addition, if studding sails are already being used by a ship at the beginning of this Phase, the owning player may declare that he is *taking in* these sails at this time, thereby permitting the ship to operate normally again.

[13.32] If a ship using studding sails is fired upon by an enemy vessel employing rigging fire, there is no negative modifier to this enemy's Fire Value due to the use of rigging fire (see 9.33d).

[13.33] During the Movement Allowance Determination Phase, a ship using studding sails is affected as follows:

- If it is beating, it is considered to be beam reaching instead.
- If it is beam reaching, it is considered to be running instead.
- If it is running, it is considered to be broad reaching instead.

**Note:** If a ship is broad reaching, there is no additional effect on its Movement Allowance.

## [14.0] RECORDING INFORMATION

### GENERAL RULE:

Before the start of play, each player should take a piece of scrap paper and list the names of his participating vessels down the left side. During the course of the scenario, certain information must be recorded on this paper which may affect the capabilities of the affected ship.

- Each time a hull or rigging hit (see 10.0) is received by a ship, the owning player must record this fact next to the appropriate vessel's name.
- Each time a ship fires its first broadside on its port or starboard side (see 9.36), this fact must be recorded by the owning player next to the appropriate vessel's name.
- Each time a critical hit (see 10.3) is received by a ship, the owning player must record this next to the appropriate vessel's name.

## [15.0] SCENARIOS

### GENERAL RULE:

There are nine scenarios in *Fighting Sail*. Each is presented in the following manner:

- Notes.** The historical background of the engagement is described.
- Wind.** The direction *from which* the wind is coming is listed (e.g., **NW** indicates that the wind is coming from the northwest, blowing toward the southeast). Place the wind marker facing in the appropriate direction in any squares on the map (the direction of the wind does not change for the duration of the scenario). Note that there is a compass rose on the map, indicating directions.
- Deployment, Player A.** The names of one player's participating ships are listed, followed by their square number of placement and bow orientation.
- Deployment, Player B.** The same information is provided for the second player.
- Game-Length.** The number of Game-Turns to be played is listed.

### GAME-LENGTH

*Scenarios with 6 or fewer ships only.*

A game ends at the moment one player has lost *all* his participating vessels as prizes or due to fire. However, a game may also end when a point is reached in play where it is no longer possible for either player to inflict damage on the other due to fire combat. If such is the case, the game is a draw. Finally, a scenario may be terminated upon mutual consent of both players. There is no definitive game-length for scenarios involving six or fewer ships; they may last as long as the aforementioned restrictions allow.

### VICTORY CONDITIONS

At the end of the game, the winner is the player who has accumulated the most Victory Points. Victory Points are awarded only for capturing and *retaining* prizes (see 12.2). (**Exception:** If a ship blows up, it is considered a prize of the enemy player for Victory Point purposes.) A ship is worth a number of Victory Points equal to 10 minus its Rate. If both players possess an equal number of Victory Points (or none at all), the game ends in a draw.



## MAP RESTRICTIONS

It is suggested that the area of play be strictly limited to the square grid as presented on the map. That is, it should be prohibited for a ship to "exit" the map at any time during the scenario. However, upon mutual consent of both players, it may be decided to allow ships to move off the square-grid at will, hypothesizing that the grid continues indefinitely in all directions. Players will have to draw their own grids to tie onto the existing map in this circumstance.

## CASES:

### [15.1] DON'T GIVE UP THE SHIP

**a. Notes.** *USS Chesapeake* (38, Capt. James Lawrence) and *HMS Shannon* (38, Capt. Philip Bowes Vere Broke) clashed on 1 June 1813 in one of the classic frigate confrontations of the War of 1812. In a 20-minute engagement, *Shannon* battered *Chesapeake* with fire, boarded her, and took her as a prize, although Captain Lawrence's battle cry of "Don't give up the ship!" became a rallying-call of the US Navy for years to come.

**b. Wind.** NW.

**c. Deployment, US.** *Chesapeake* (0807, SE).

**d. Deployment, British.** *Shannon* (0811, E).

**e. Game-Length.** See 15.0.

### [15.2] WASP VS. FROLIC

**a. Notes.** *USS Wasp* (18, Captain Jacob Jones) engaged *HMS Frolic* (19, Captain Thomas Whinyates) on 18 October 1812 in rough seas off the mouth of the Delaware River. In a 43-minute battle, both vessels were battered, but *Wasp* won the upper hand by successfully boarding her antagonist. Ironically, a few hours after the engagement, *Wasp* herself fell prey to the British ship-of-the-line *HMS Poitiers* (74), which arrived on the scene as the battle was coming to a close.

**b. Wind.** N.

**c. Deployment, US.** *Wasp* (0805, S).

**c. Deployment, British.** *Frolic* (1108, W).

**e. Game-Length.** See 15.0.

**Note:** Both *Wasp* and *Frolic* are carronade-armed (see 9.38).

### [15.3] "BEAT TO QUARTERS" LYDIA VS. NATIVIDAD

**a. Notes.** On 20 July 1808, *HMS Lydia* (36, Captain Horatio Hornblower) brought the Panamanian two-decker, *Natividad* (50, Vice Admiral Don Cristobal de Crespó), to battle off the Pacific coast of Panama. In a furious engagement that occupied the better part of a day, *Lydia* punned her opponent into a wreck. *Natividad* finally caught fire and sank.

**b. Wind.** W.

**c. Deployment, British.** *Lydia* (0615, NE).

**d. Deployment, Panamanian.** *Natividad* (1115, N).

**e. Game-Length.** See 15.0.

**Note:** This scenario is taken from C.S. Forester's novel, *Beat to Quarters* (published in Britain as *The Happy Return*).

### [15.4] "OLD IRONSIDES"

**a. Notes.** On 19 August 1812, the most famous warship in American history, *USS Constitution* (44, Captain Isaac Hull), fought her first and most renowned action against the British frigate, *HMS Guerriere* (38, Captain James Dacres). In an engagement that lasted approximately 90 minutes, *Constitution* was handled flawlessly, repeatedly raking her opponent. *Guerriere* put up stiff resistance, but finally fell prey to American boarders.

**b. Wind.** W.

**c. Deployment, US.** *Constitution* (0610, SE).

**d. Deployment, British.** *Guerriere* (1009, S).

**e. Game-Length.** See 15.0.

**Note:** This scenario is balanced in favor of the American player, so it is suggested that the player with more experience play the role of the British.

### [15.5] "OLD IRONSIDES" 'LAST FIGHT

**a. Notes.** On 20 February 1815, "Old Ironsides" (now under command of Captain C. Stewart) was cruising off the Rock of Lisbon, preying on British merchantmen in Portuguese waters. Stewart encountered two British sloops, *HMS Cyane* (34, Captain Gordon Falcon) and *HMS Levant* (21, Captain Hon. George Douglass). In 40 minutes of brilliant maneuvering, *Constitution* engaged the British ships in detail, forcing *Cyane* to strike after exchanging numerous broadsides, and then taking *Levant* in a running gun-duel.

**b. Wind.** S.

**c. Deployment, US.** *Constitution* (0712, E).

**d. Deployment, British.** *Cyane* (0509, E), *Levant* (0808, E).

**e. Game-Length.** See 15.0.

### [15.6] ACTION OFF VENICE

**a. Notes.** On 21 February 1812, the British ship-of-the-line, *HMS Victorious* (74, Captain John Talbot) and the brig *HMS Weazel* (18, Commodore John Andrew) were patrolling in the Adriatic Sea off Venice. Early in the morning, a French squadron under the command of Commodore J.B. Barre exited Venice harbor and formed a line of battle in the direction of Pola. This force consisted of the new ship-of-the-line *Rivoli* (74), and the brigs *Jena* (18), *Mercure* (18), and *Mamelouck* (10). In an extended engagement, *Rivoli* was battered into a wreck by *Victorious*, while *Weazel* successfully engaged the three French brigs, blowing up *Mercure* and driving *Jena* and *Mamelouck* away.

**b. Wind.** W.

**c. Deployment, British.** *Victorious* (1112, NE), *Weazel* (0512, E).

**d. Deployment, French.** *Rivoli* (1008, E), *Jena* (0705, E), *Mercure* (0508, E), *Mamelouck* (0503, E).

**e. Game-Length.** See 15.0.

### [15.7] "I HAVE NOT YET BEGUN TO FIGHT"

**a. Notes.** On 23 September 1779, a mixed American-French squadron under the command of Commodore John Paul Jones was cruising in the North Sea, searching for British Baltic-bound convoys. At 3:00 p.m., Jones sighted a huge convoy of 44 sail, protected by two British warships, *HMS Serapis* (50, Captain Richard Pearson) and *HMS Countess of Scarborough* (10, Captain Thomas Piercy). Jones offered battle with his force, which consisted of the Old East Indian *Bonhomme Richard* (40, under Jones), the frigate *Alliance* (36, Captain Pierre Landais), and the sloop *Pallas* (32, Captain Denis Cottineau). In a battle that has gone down in the annals of American folklore, *Richard* took *Serapis* in a violent engagement, although *Richard* herself sunk later in the day — Jones having transferred his flag to the captured *Serapis*.

**b. Wind.** NE.

**c. Deployment, US.** *Bonhomme Richard* (1510, NW), *Pallas* (1811, NW), *Alliance* (2112, NW). See special rule below.

**d. Deployment, British.** *Serapis* (0909, SE), *Countess of Scarborough* (0606, SE).

**e. Game-Length.** See 15.0.

**Note:** *Alliance* is considered to possess a wheel critical hit at the start of the game (see 10.32). If it receives a wheel critical hit during play, it is considered a mast critical hit.

### [15.8] "WE HAVE MET THE ENEMY AND THEY ARE OURS"

**a. Notes.** During the War of 1812, control of the Great Lakes assumed great strategic importance. On the southern shore of Lake Erie, Captain Oliver Hazard Perry constructed an American naval force virtually from scratch, while on the northern shore British Captain Robert Heriot Barclay performed a similar feat with limited resources. Perry brought Barclay to battle on the lake on 10 September 1813. Although forced to shift his flag from the battered *Lawrence* to *Niagara* at the opening of the engagement, Perry's squadron forced Barclay's entire force to strike its colors by the end of the day.

**b. Wind.** N.

**c. Deployment, US.** *Scorpion* (1907, SE), *Ariel* (1706, SE), *Lawrence* (1606, SE), *Caledonia* (1404, SE), *Niagara* (1304, SE), *Somers* (1203, SE), *Porcupine* (1002, SE), *Tigress* (0802, SE), *Trippie* (0602, SE).

**d. Deployment, British.** *Chippeway* (2012, E), *Detroit* (1812, E), *Hunter* (1612, E), *Q. Charlotte* (1412, E), *L. Prevost* (1212, E), *Belt* (1012, E).

**e. Game-Length.** 12 Game-Turns.

**Notes:** Ignore Case 9.33g. Instead, 10 is added to a ship's Fire Value if its first broadside is delivered at 3 Range Points or fewer. At more than 3 Range Points, no bonus is awarded.

### [15.9] THE BATTLE OF SANTO DOMINGO

**a. Notes.** In the aftermath of Trafalgar, the French Brest fleet evaded the British blockading squadron under the command of Admiral William Cornwallis and proceeded westward across the Atlantic Ocean. The French split into two squadrons, one of which entered the Caribbean Sea under the command of Admiral Corentin Urbain Leissegues. On 4 February 1806, this force encountered a strong British squadron under the command of Admiral Sir John Duckworth. In a sharp engagement off the coast of Santo Domingo, the French fleet was completely dispersed, losing three ships-of-the-line as prizes.

**b. Wind.** NW.

**c. Deployment, British.** *Acasta* (1111, S), *Kingfisher* (1010, S), *Epervier* (0909, S), *Magicienne* (0808, S), *Superb* (1209, S), *Northumberland* (1108, S), *Spencer* (1007, S), *Canopus* (1204, S), *Donegal* (1103, S), *Atlas* (1002, S), *Agamemnon* (0803, S).

**d. Deployment, French.** *Felicite* (1813, W), *Comete* (1912, W), *Diligente* (2011, W), *Alexandre* (1711, W), *Imperial* (1810, W), *Diomedee* (1909, W), *Jupiter* (2008, W), *Brave* (2107, W).

**e. Game-Length.** 16 Game-Turns.

## FIGHTING SAIL DESIGN CREDITS

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## SUMMARY OF MODIFIERS TO FIRE VALUES

See 9.33

- 1. Rate.** Subtract Rate of firing ship from Rate of target ship and multiply by **10**. See 9.33a.
- 2. Range.** Divide number of Range Points from firing ship to target ship by **4** (drop fractions). Multiply by **10** and subtract from the firing ship's Fire Value.
- 3. Damage.** Divide number of hull hits possessed by firing ship by **2** (drop fractions). Multiply by **10** and subtract from firing ship's Fire Value.

**4. Rigging Fire.** If rigging fire is being attempted at **6** Range Points or fewer, subtract **10** from firing ship's Fire Value.

**5. Tacking.** If tack has just been performed, subtract **10** from firing ship's Fire Value.

**6. Rakes.** If a bow rake is performed, add **10** to firing ship's Fire Value. If stern rake is performed, add **20** to firing ship's Fire Value.

**7. First Broadside.** If a first broadside is performed at **3** Range Points or fewer, add **20** to firing ship's Fire Value. If a first broadside is performed at between **4** and **6** Range Points (inclusive), add **10** to firing ship's Fire Value.

## GAME-TURN SEQUENCE

Each Game-Turn must proceed strictly according to the following outline.

### A. STRATEGIC CYCLE

*All Game-Turns divisible by 8.*

**1. Swell Phase.** Both players determine the effects of swell on their ships that are dead in the water (see 13.1).

**2. Fire Phase.** Both players must determine if their ships that are on fire blow up (see 13.2).

**3. Studding Sail Phase.** Players may deploy or take in studding sails (see 13.3).

### B. COMMAND DECISION STAGE

*Both players secretly issue commands to all of their ships (see 6.0).*

### C. ACTION STAGE

**1. Command Revelation Phase.** Both players reveal all their issued commands.

**2. Movement Allowance Determination Phase.** All ships receive a Movement Allowance (see 5.22).

**3. Weather Gauge Phase.** The player who possesses the Weather Gauge must be determined (see 7.2).

**4. Movement Phase.** According to the whim of the player with the Weather Gauge, each ship's Movement Allowance is expended to the fullest extent possible (see 7.5).

### D. MELEE STAGE

**1. Fire Phase.** Fouled ships may perform fire combat against one another (see 11.1).

**2. Melee Phase.** Melee combat takes place between enemy ships fouled together (see 11.2).

### E. UNFOULING STAGE

*Fouled ships may attempt to unfoul (see 11.3).*

### F. TERMINAL STAGE

*All ships on the map should be flipped to their front countersides (see 9.13). The Game-Turn is ended, and a new Game-Turn is begun.*





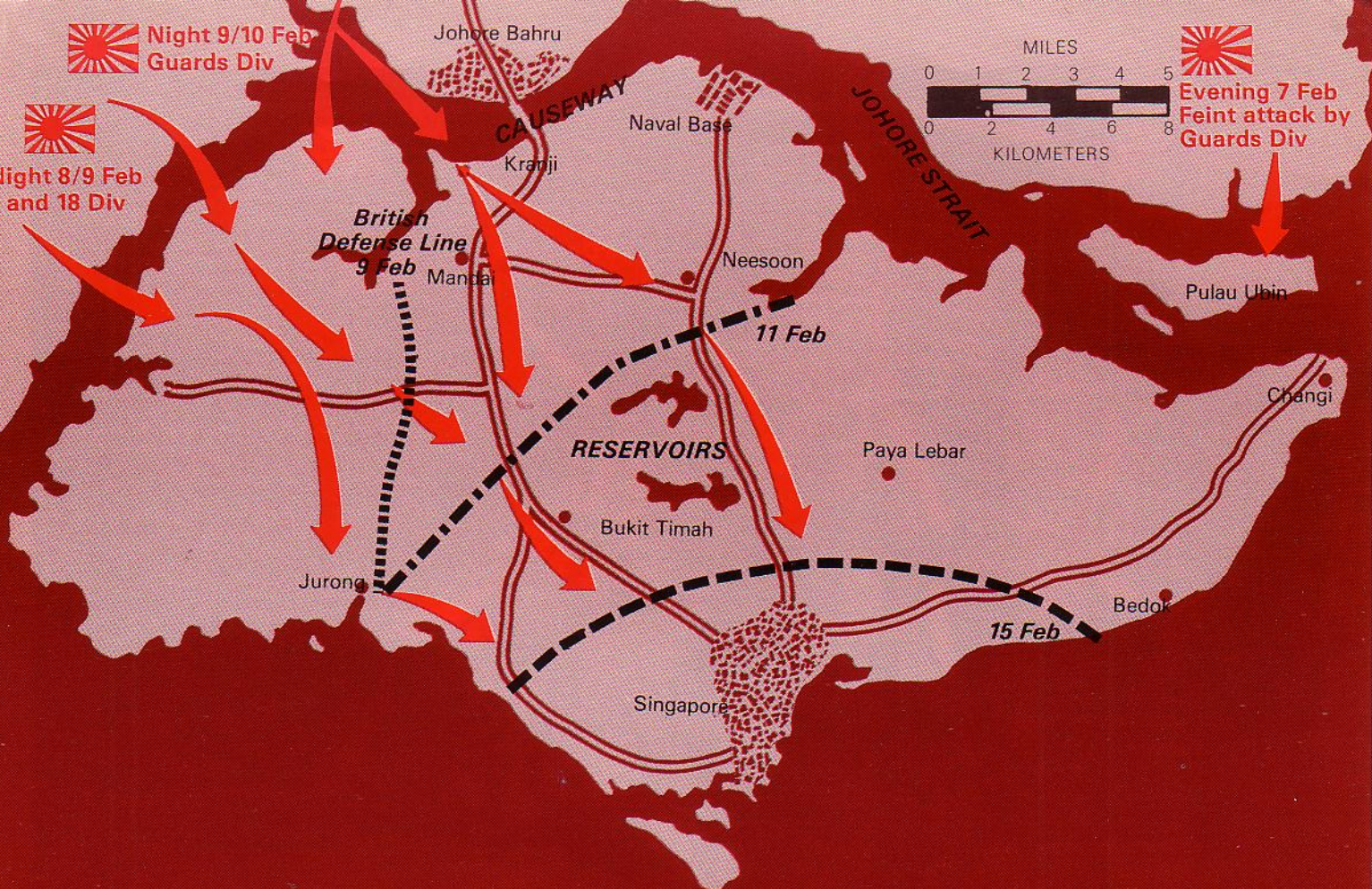
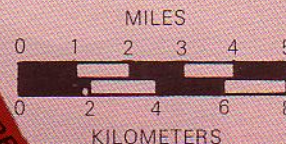
Night 9/10 Feb  
Guards Div



Night 8/9 Feb  
5 and 18 Div



Evening 7 Feb  
Feint attack by  
Guards Div



# SINGAPORE

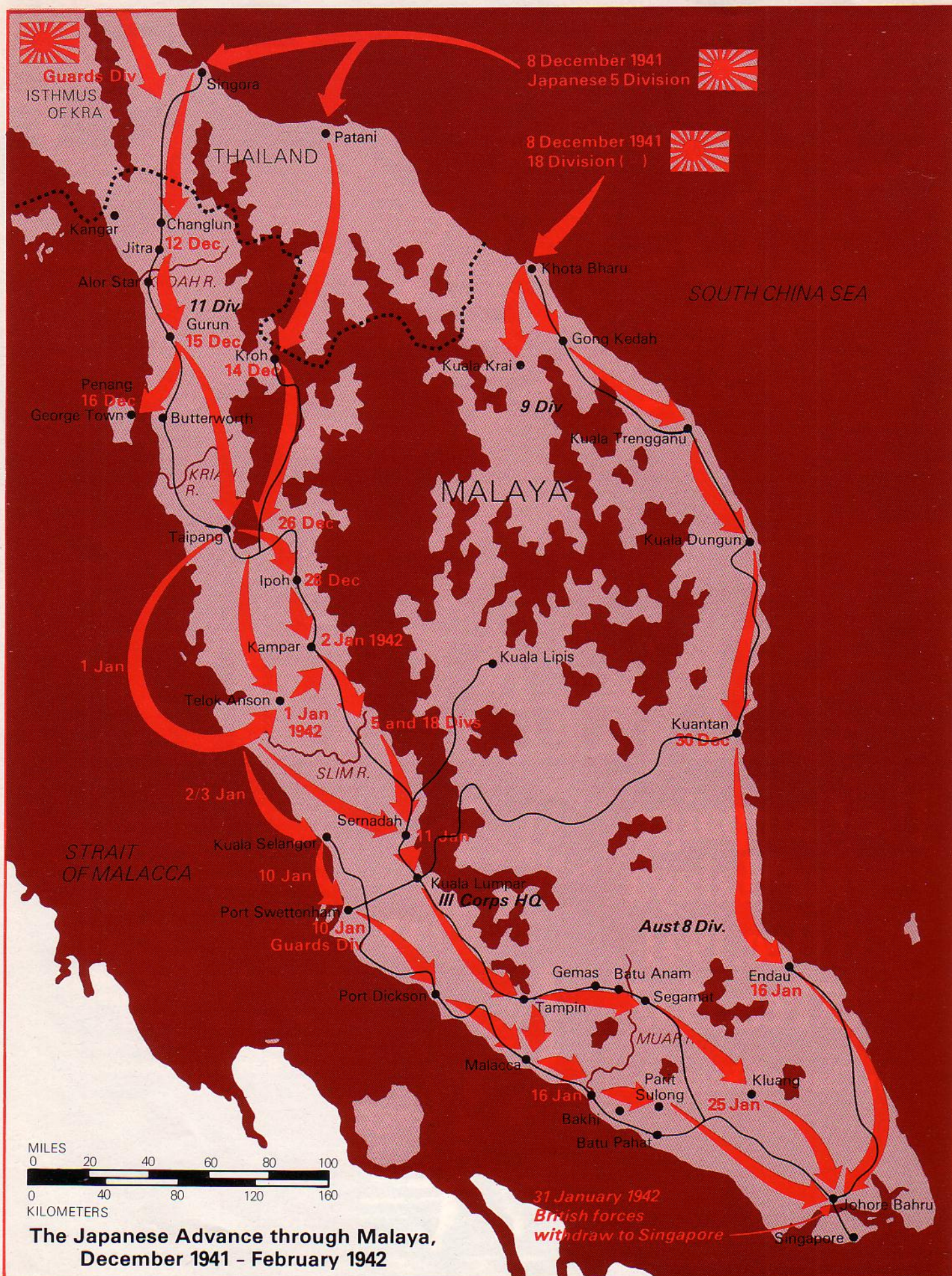
**The Campaign  
for Malaya  
8 Dec. 1941-  
15 Feb. 1942**

by Charles T. Kamps Jr.



On the 15th of February, 1942, 80,000 British Empire and Commonwealth troops surrendered to the Japanese at Singapore in the final humiliation of the greatest military defeat in British history. In a campaign lasting just 70 days, the Japanese 25th Army advanced 400 miles, often against a numerically superior enemy, at the cost of fewer than 10,000 casualties.







## The Prize

With the scrapping of the Anglo-Japanese Alliance at the Washington Naval Disarmament Conference of 1922, Britain once again found herself saddled with a defense commitment in the Far East. Over the next two decades, British strategy for the region revolved around the building of a huge naval base at Singapore to support any fleet the Royal Navy would have to dispatch in support of the Empire. Through this period, defense of the base was considered by the Chiefs of Staff to be paramount. Security would be entrusted to coastal fortifications mounting modern guns of up to 15-inch caliber, and a couple of army brigades for local security. The garrison was expected to hold out for a maximum of 70 days, whereupon the arrival of the fleet would relieve the defenders. Work on the fixed defenses proceeded slowly due to peacetime budget restraints, and the naval base did not formally open until 1938.

During this period, Japan's program of economic expansion resulted in a doubling of industrial output between 1931 and 1939, and a consequent doubling of her military budget in support of operations in China. The Japanese Empire's weakness lay in a shortage of natural resources, particularly in oil, of which 90 percent had to be imported. Japan's occupation of French Indochina in July of 1941 triggered a freeze on Japanese assets in the United States, which cut off the Japanese from oil and scrap iron supplies and confirmed Japan in her decision to go to war. To make good these shortfalls in the wake of Western embargoes, the Japanese turned to the "Southern Resources Area" (Indonesia, Indochina, and Malaya) as a target for aggression. Malaya would be a particularly rich prize, producing 38 percent of the world's natural rubber and 58 percent of its tin. To knock the Western Allies off balance, and hopefully secure a negotiated peace, the Japanese planned a brilliant surprise offensive to be initiated by 25 simultaneous strikes throughout the Pacific and Asia.

## Terrain

More than half of Malaya is covered with dense jungle, thicker than the jungles of Burma or India. On either coast, its mountainous spine flattens into plains, with mangrove swamps in the west and sandy beaches in the east. Major cultivation is confined to rubber plantations about one mile on either side of the few roadways. Adding to the difficulties of maneuver, the northeast monsoon visits Malaya on a seasonal basis. Lying within 100 miles of the equator, the country's temperatures hover around 81°F. in the shade day and night, summer and winter, and the heat is accompanied by debilitating humidity. Coupled with the oppressive atmosphere of the jungle, this condition severely taxes the stamina of Europeans.

Use and misuse of terrain was pivotal to the outcome of the Malayan campaign. The original British concept of defense, formulated in the 1920's, presupposed the jungle to be an impenetrable barrier to an invader. Defenses, therefore, were concentrated exclusively to cover the base on Singapore Island. Commercial exploitation, however, provided a limited but crucial road net which would render the jungle a minor obstacle to the advancing Japanese.

When the Royal Air Force entered the defense planning picture, its pundits convinced the Chiefs of Staff that the airplane, as an extension of the coast gun, could defeat an enemy fleet far out to sea. A multitude of airfields were thus built from which the RAF expected to operate up to 500 aircraft. In the event, only 150 obsolescent planes were available in the theater, leaving the Army with the added burden of indefensible airfields up country, which the Japanese would put to use.

The Japanese were well aware of the potential difficulties of an advance down the Malayan peninsula. In expectation of most of the 250 bridges along the trunk road being blown up in their faces, they provided each of their divisions with a direct support engineer regiment. This proved instrumental in maintaining the momentum of the advance. To cite one example, British commanders expected at least 72 hours respite after destroying the bridge over the Sungai Kedah. They were surprised by the Japanese on their new positions within 30 hours. Neither did the monsoon prove a hindrance to the Japanese as the British had supposed. Major-General William Dobbie, commanding Malaya in the late thirties, reported that his exercises proved that the Japanese could amphibiously invade Malaya during the monsoon. His findings were forgotten.

Throughout the campaign, and despite the abysmal inaccuracy of their maps, the Japanese continually made use of trails, estate roads, and tracks to outflank British defensive positions which were oriented on the main roads. At this point it would be appropriate to note that the Japanese were not "expert jungle fighters" in 1941. In fact, the units used in Malaya were assembled from such diverse places as Hainan, Manchuria, and Japan proper. They did, however, put into practice an excellent body of doctrinal literature developed by a jungle warfare study team on Formosa.

## British Forces

Lord Wavell commented in 1941 that Malaya had been asleep for 150 years. He was referring to the lethargic state of the military and civilian authorities, who fostered a spirit of "business as usual" right up to the fall of Singapore. This incredible sense of "non-urgency" remains one of the most inconceivable facets of the campaign. The failures of the government seem criminally negligent in retrospect. Although space prohibits a catalog of the omissions of the Malayan colonial administration, the military hierarchy will be examined. As noted in the section on *Organization of Ground Forces*, the three divisions in Malaya were considerably under strength, a condition only partly offset by the presence of two independent infantry brigades and the pre-war garrison of British regulars and natives. At least two additional brigades should have been present at the outset, one belonging to the 9th Indian Division (which was detached to Iraq) and one from the 8th Australian Division (which remained in Australia). The absence of these units severely restricted the flexibility of their parent divisions.

The British Indian Army comprised about half the strength of Malaya Command. Prior to the war, this force consisted of long service professionals, trained and equipped to fight on India's Northwest Frontier against marauding tribesmen. The motorization of the Indian Army had just started, and soldiers with technical experience were consequently lacking. Combat effectiveness was largely a product of the personal leadership of British officers and the loyalty of the native Indian soldiers to those officers and their regiments. By 1941, however, the Indian Army was in the middle of an unprecedented expansion program, designed to support the bulk of the pre-war elite formations engaged in North Africa and the Middle East. Battalions sent to Malaya often had been "milked" twice or more to provide replacement drafts or cadres for the establishment of new battalions. Thus, units lacked not only requisite heavy weapons but experienced soldiers and non-commissioned officers as well. One can readily imagine the difficulties when many of these semi-literate recruits, from diverse classes and cultures — not to mention languages — were placed under

"emergency commissioned" officers who themselves had only a superficial knowledge of India. To make matters worse, units thrown into Malaya had little or no time for training as brigades and divisions, training that is essential to battlefield teamwork.

The 8th Australian Division had been organized in August of 1940 (though the 27th Brigade was not formed until November) from a small cadre of pre-war regulars and militia officers. The Australians suffered from the lack of modern weaponry and seasoned soldiers too, having committed a large expeditionary force to the Mediterranean theater. The jungle was a foreign environment to the Australians, but their officers were enthusiastic to train in it. They received no encouragement from the British high command.

Other units in Malaya included several battalions of infantry belonging to the princes of various semi-independent states in India and Malaya. These units were only suitable for static internal security duties and airfield defense. The Volunteer Forces were composed of equal parts of Malay, Chinese, and European part-time soldiers. A potential asset, their training and equipment was incomplete, but it need not have been, had they been mobilized earlier. This was not done because the European element was needed to keep the mines running efficiently.

One severe British handicap was the complete lack of armor. Understandably, Malaya is horrible tank country. Many of the Indian troops, however, had never even *seen* a tank, let alone received training in how to defeat one. Under such conditions the Japanese ran the only game in town, and they pressed their advantage. Against trained troops with well prepared anti-tank obstacles, the Japanese armor would have been neutralized.

The British Army assumed responsibility for defense of the entire Malay peninsula long before the outbreak of hostilities. In this light, it is a mystery that the high command did not implement a jungle training program. Astute subordinates developed their own, often to good effect. Outstanding among these was Lieutenant-Colonel Stewart, whose 2nd Battalion of the Argyll & Sutherland Highlanders performed magnificently throughout the campaign. Characteristically, Stewart was regarded as a crank by his peers before the Japanese invasion.

Reinforcements which reached Malaya after the outbreak of war included two brigades from the 17th Indian Division and the complete 18th British Division (which arrived in time to be "bagged" at Singapore). In quality, the Indians were even worse off than their countrymen already in Malaya, and the British division had been trained and equipped to fight in the expanses of the western desert. Had the British held out longer, other reinforcements would have been available which were subsequently dispatched elsewhere as Singapore fell. These potential reinforcements included: another brigade of the 17th Indian Division (which went to Burma); the veteran 6th and 7th Australian Divisions from the Mediterranean (diverted to Ceylon and later to New Guinea); and the 7th Armored Brigade from North Africa (rerouted to Burma).

The RAF expected to shoulder the burden of Malayan defense with a large air contingent. Staff estimates of how many aircraft would be required escalated from something over 300 planes to a figure approaching 600. It was unrealistic to suppose that either of these figures could have been met by Britain's strained resources in 1941, especially as the Far East ranked fourth on London's priority list. After the start of hostilities, perhaps as few as 50 Spitfires diverted to Malaya could have provided *some* serious opposition to the Japanese



Zero — at least enough to allow British bombers to render minimal assistance to the demoralized Army. Such was not to be the case.

The General Officer Commanding British ground forces in Malaya was Lieutenant-General A.E. Percival. He had been a successful battalion commander in World War I, and as principal staff officer in Malaya in 1937 he sponsored a staff study which accurately predicted the Japanese course of advance four years later. In theory he appeared to be the man for the job; in fact, his incompetence only hastened the fall of Malaya.

### Japanese Forces

It is interesting to note the British high command's official perceptions of the Japanese prior to December 1941. The Chiefs of Staff, in reference to aircraft, "had no reason to believe that Japanese standards were even comparable with those of the Italians"; Far East Command held the opinion that "The Japanese Army is a bubble waiting to be pricked"; Malaya Command asserted in training literature that the Japanese soldier was "peculiarly helpless against unforeseen action by his enemy"; and the Australian HQ in Malaya, concerning jungle training, stated that "our enemy will not be so trained...is unaccustomed to any surprise and reacts badly to it. Generally speaking he is weak in small unit training, and the initiative of his small units is of a low standard." A few officers, who had observed the Japanese first hand, knew better.

Unlike the diverse elements forming the British force, the Japanese Army was a homogeneous body from a society that valued military virtues. Obligation to the divine Emperor and a strict code of behavior were part of the life of every Japanese citizen. Death in battle was considered an honor; surrender, an unendurable humiliation. Discipline was stiffer than anything known in the West. Eighty percent of the Japanese conscripts were laborers or peasants, and many had prior military experience. Training was tough and exacting, involving privations of heat, cold, and hunger to harden the troops.

Japanese units in Malaya were fitted out with all necessary weapons and provisions, and stripped of any encumbering impedimenta. The soldiers moved and ate light, and could travel rapidly — even along jungle trails — using the Japanese "secret weapon," the bicycle. In all cases, their junior officers were not afraid to display initiative and aggressiveness in outmaneuvering the British. The tactics they employed, like their equipment, were based largely on experience in China where fighting guerrillas necessitated the use of small independent columns, rapid movement, and encirclement. Additionally, at this time the Japanese had more experience in amphibious operations than any other army in the world.

The divisions of the 25th Army were further seasoned by a measure of active campaigning. The best division, the 5th, served in China from 1937 until late 1941, when it transferred to Hainan to train for Malaya. Similarly, the 18th Division went to China in 1938, taking part in several campaigns. Only the Guards Division lacked serious combat experience, going to south China in 1940, and participating in the occupation of Indochina. In all, the prevailing mood of the Japanese force was one of aggressive confidence.

The enthusiasm of the troops, however, was marred by ill feelings within the high command. Although their commander, Lieutenant-General Tomoyuki Yamashita, was an able infantry officer and a strict adherent of the *Samurai* code, he was not in favor with the Emperor. He was constantly at odds with his superior, Field Marshal Count Taurachi (Southern Area Army), because the two belonged to rival factions within the Japanese

Army. Similarly, his relations with Nishimura, the Imperial Guards commander, were strained to the point of insubordination. Yamashita never received the recognition he deserved for the astounding victory in Malaya, but was shuffled off to a dead end command in Manchuria, and finally was given command of the Philippines in 1944. After the war he was tried for alleged war crimes and hanged by the Allies.

### The Hollow Bastion

In September of 1939, the war in Europe caused Britain's Chiefs of Staff to re-evaluate the Far Eastern defense picture. The estimate of 70 days for arrival of a relief fleet was revised to 180 days, and in minor compensation the 12th Indian Brigade (an excellent unit) was dispatched to reinforce the 1st and 2nd Malayan Brigades. In October and November of 1940, a renewed interest by London resulted in the further reinforcement of Malaya with the 6th and 8th Indian Brigades, and the Headquarters of the 11th Indian Division. At the same time, command of all British forces in the Far East was invested in Air Chief Marshal Sir Robert Brooke-Popham, brought out of retirement and given a small staff. The choice of an air officer for this post was unfortunate, as the aircraft deemed necessary for Malayan defense would never be available.

During 1941, growing anxiety over Japan's menacing outlook resulted in a stepped up tempo of reinforcement. February saw the arrival of the 22nd Australian Brigade, followed in March and April by the 15th and 22nd Indian Brigades and the Headquarters of the 9th Indian Division. Percival took over Malaya Command in May, coincident with the arrival of his strong-willed subordinate, Lt-Gen. Sir Lewis Heath, G.O.C. III Indian Corps. Percival appeared unenthusiastic about pursuing a vigorous training program, in marked contrast to the Australians' commander, Maj-Gen. H. Gordon Bennett, who seethed over British inactivity. Similarly, Percival vetoed the programs proposed by his Chief Engineer, Brigadier Ivan Simson, designed to strengthen Malaya by the construction of anti-tank and beach defense obstacles, and later schemes to fortify Singapore's north shore. It was all Simson could do to get approval to publish an anti-tank handbook for the troops, which was finally ready for distribution when the Japanese attacked.

During August and September of 1941, Gordon Bennett received the 27th Australian Brigade, sent out to Singapore after eight months training, and Heath received the underequipped and ill-trained 28th Indian Brigade for a corps reserve. These were the last maneuver units to reach Malaya before the invasion. London attempted to rectify some of the combat support deficiencies of the garrison in October and November by sending out three artillery field regiments and an anti-tank regiment, along with the Indian 3rd Cavalry (a truck-mounted reconnaissance battalion). Thus, Percival faced the Japanese in December with a total force of:

- 31 × Infantry battalions (18 × Indian, 6 × Australian, 6 × British, 1 × Malay)
- 7 × field regiments (5 of 24 guns; 2 of 16 guns)
- 1 × mountain regiment (24 guns)
- 2 × anti-tank regiments (1 of 48 guns; 1 of 36 guns)
- 2 × anti-tank batteries (1 of 8 guns; 1 of 6 guns)
- 10 × volunteer battalions (local defense)
- 6 × Indian & Malay states battalions (static defense)

These units totaled 88,600 men (19,600 British, 15,200 Australian, 37,000 Indian, and 16,800 local), organized into three weak divisions

and two brigade groups scattered over the length of Malaya, two brigades in Singapore, and a multitude of small static garrisons. On "the other side of the hill," Yamashita was offered up to five divisions for the invasion but accepted only three, with combat and support elements totaling 88,000 men. This is one of the few examples in history when a commander has voluntarily refused additional troops prior to undertaking a major offensive. Japanese Army Headquarters took the precaution, however, of retaining the 56th Division in Japan as a reserve to bail out Yamashita if necessary. In the event, Yamashita needed no further assistance, and the 56th Division was released for operations in Burma.

### Opening Moves

Anticipating a Japanese advance into northern Malaya by way of the Siamese ports of Singora and Patani, the British had prepared a plan called Operation MATADOR which called for a preemptive move to occupy the likely landing areas. On the 6th of December, 1941, a British reconnaissance plane spotted Japanese transports heading toward the Isthmus of Kra. Brooke-Popham was in a dilemma. If he ordered MATADOR and the Japanese were bluffing, it would provide them with a ready-made cause for war — British aggression in Siam. On the other hand, should British troops remain in Malaya the Japanese would be able to land unopposed at Singora and Patani. It was a sticky political choice, but one which London granted Brooke-Popham the authority to make on his own. The 11th Indian Division (6th and 15th Bdes) was standing by to execute MATADOR, and a reinforced battalion group known as Krohcol (for Kroh Column) was ready to advance into Siam as well, to protect the division's flank and communications. Brooke-Popham chose to stand fast, and ordered the 11th Division to dig in. On the morning of the 8th, the Japanese conducted essentially administrative landings at Singora (11th and 41st Regt) and Patani (42nd Regt) with the 5th Division.

Simultaneously, battle was joined at Kota Bharu on the Malayan coast, where the 56th Regt of the 18th Division conducted a diversionary assault against the 8th Indian Brigade. Prompt action by British aircraft and Dutch submarines threatened to turn the Japanese landing into a disaster, but the monsoon finally shielded the attackers and allowed them to gain a foothold. The Indians exacted a terrible toll on the Japanese, but among rumors of a breakthrough, the ground crews of the two air bases being covered set fire to their stores and fled. The confused defenders fell back, and several days later received permission to entrain and move south, as the reason for their deployment — defense of the airfields — was no longer an issue. In the meantime, Japanese aircraft from Indochina hammered the forward disposed RAF on other bases throughout northern Malaya. Sixty of the 110 British planes in the area were put out of action on 8 December alone.

To the west, Lt-Col. H.D. Moorhead's Krohcol fought its way past Siamese border constabulary in an effort to reach a terrain feature called "the Ledge," where it was to delay the Japanese. At Jitra, the 11th Division hastily tried to organize a defense and reconfigure its transport from its former orientation (MATADOR). In the pouring rain of the monsoon, the troops dug in....

### Disaster at Sea

As part of the last minute efforts to "deter" the Japanese, British Prime Minister Winston Churchill dispatched the battleships *Prince of Wales* and *Repulse* to Singapore. When the Japanese landed, Admiral Sir Tom Phillips (com-



manding "Force Z" as it was called) was eager to get his capital ships into action. Sailing north with the two battleships and four destroyers, Phillips was informed by radio that the fighter cover he requested would not be available due to the chaotic situation in northern Malaya. He decided to press on nevertheless, until he was sure that the Japanese had spotted his force.

On the afternoon of 9 December, Force Z's position was reported by a patrolling Japanese submarine, and Vice-Admiral Kondo (commanding Southern Force) made immediate arrangements to intercept it with two battleships and six heavy cruisers. That evening, three Japanese aircraft appeared over Phillips' ships, and he reluctantly turned back to Singapore. On the way he received an erroneous report of a Japanese landing at Kuantan and altered course to intercept. Evidently he assumed that his Chief-of-Staff in Singapore would arrange appropriate air cover, but since the staff had no way of knowing what Phillips' intentions were, no air operations were ordered.

Finding no Japanese at Kuantan, Phillips again adjusted course for Singapore. Torpedo bombers of the 22nd Air Flotilla, however, closed in for the kill on the morning of 10 December. Within two hours, both battleships had been sunk and Phillips was dead. Learning the news, Churchill would write, "In all the war I never received a more direct shock." The British "fleet in being" had been annihilated.

### The Oriental Blitz

The 11th Indian Division prepared to meet the Japanese on a 14-mile front stretching from the mountains to the sea at Jitra, a position *north* of the obvious defensive terrain feature, the Kedah River. This disadvantageous ground was chosen because it allowed the British to cover the airfield at Alor Star which, ironically, was abandoned anyway after the Japanese air offensive of the first few days. The Jitra position was essentially marsh and swamp, except for the jungle clad hills on the British right and the trunk road which ran through the middle. Instead of organizing a defense in depth, the division commander spread his two brigades out laterally to defend the entire front. Having been given the 28th Brigade, he detached his battalions as local reserves and outpost units.

On the 11th and 12th of December, strong Japanese patrols, supported by tanks, overran the outposts and reconnoitered the main British positions. From the start, Japanese tactics proved frighteningly effective. The main positions would be cracked frontally, often by as little as a single tank company and a motorized infantry battalion, while bicycle-mounted infantry "hooked" around road blocks on plantation tracks and jungle trails. Throughout the campaign Japanese tanks were handled with boldness and audacity that would have delighted Murat or Patton. In one instance, after overrunning an infantry column, a Japanese tank unit raced to a critical bridge where the leading platoon commander dismounted his tank under fire to cut the bridge demolition wires with his samurai sword. The unit penetrated miles further into the British rear area and was only halted by the point blank fire of 4.5-inch howitzers of the Royal Artillery.

The British situation deteriorated rapidly. By the night of the 12th/13th, rumors of disaster and erroneous reports of Japanese movements had filtered through the division. Undependable communications and unauthorized employment of the division's meager reserve by one of the brigadiers left the division commander with little ability to influence the battle. Ordering a withdrawal, along a single route in horrible weather, completed the disaster as the Japanese made further attacks. By the time the division

reached its next defensive position, Gurun (19 miles south of Alor Star), on the night of the 13th/14th, the 15th Indian Brigade had lost nearly 75 percent of its strength. Meanwhile, to the east, Krohcol got within five miles of the Ledge and encountered Japanese tanks and motorized infantry. Krohcol continued to fight a valiant delaying action, but it was apparent that the Japanese would soon be in the rear of the 11th Division unless further withdrawals were undertaken.

The Gurun position was astride the trunk road in a three-mile gap between heavy jungle and high ground. The 6th and 28th Brigades held the gap, with the emaciated 15th Brigade in reserve. The British retreat had been so precipitous and the Japanese pursuit so relentless that the troops had had little respite, being subjected to Japanese probing attacks almost at once. On the morning of the 15th, the Japanese penetrated deeply into the 6th Brigade's sector, prompting a further precipitous withdrawal. This time Heath ordered the division to stand at the Perak River, necessitating a retirement of over 80 miles, because of the additional threat to the division's communications from the Japanese column advancing on Kroh. Elsewhere, the flight of the 11th Division left Penang Island unsupported and the British garrison evacuated it on the 16th. No provision had been made to either disperse or destroy the coastal shipping at Penang, so the Japanese collected a valuable mobility asset after brushing aside slight resistance from local Volunteers. To the east, the Japanese maintained heavy pressure on Krohcol in an attempt to get behind the 11th Division, and on the east coast, the Japanese drove south and attacked the 22nd Indian Brigade at Kuantan, forcing its withdrawal in early January. In the meantime, the Japanese were reinforced by the arrival of the 55th Regt (18 Division) at Kota Bharu and the 4th Guards Regt from Siam, while the 45th Indian Brigade joined the British garrison at Singapore.

### Northern Malaya Lost

After the 16th, the British retreated almost continuously. At Penang, the British had demonstrated their unwillingness to stand and defend a major population center, and the evacuation of the Europeans there looked suspiciously like racial discrimination to the Asians. Where the Malay and Chinese populations were once a

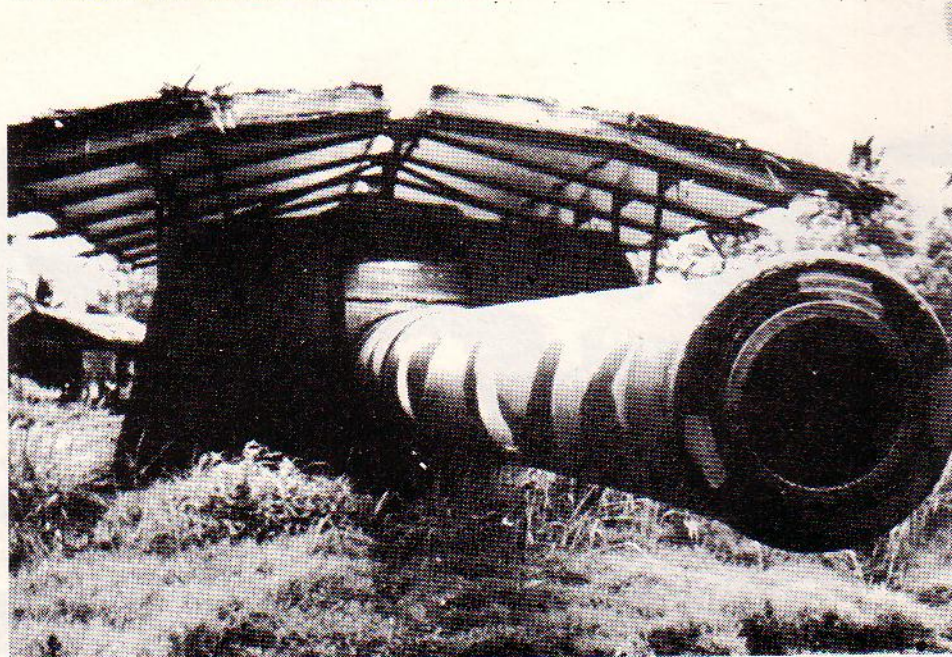
potential source of irregulars, which could have slowed the Japanese advance, they now shunned their former masters and even collaborated with the invader.

In the meantime, a number of general officers in the British force were replaced for sickness, wounds or incompetence, and Brooke-Popham was relieved as commander of the Far East by a soldier, Lieutenant-General Sir Henry Pownall, whose appointment did little to help the deteriorating situation. At the front, the 6th and 15th Brigades were merged to create one brigade, the new 15th. The command reserve, 12th Indian Brigade, assisted Krohcol's fighting withdrawal and linkup with the 11th Division on its new position at Kampar. The Kampar position, anchored as it was on rugged terrain features, promised to ease the Japanese flank threat; the Japanese, however, had totally different plans. Using shipping captured at Penang, the 11th Regt embarked at Port Weld and landed near Telok Anson, 30 miles behind the British positions. Thus, in spite of the fierce resistance to Japanese attacks by the 15th Brigade, Kampar had to be abandoned on the 2nd of January.

Heath ordered the 15th Brigade to retire about 50 miles while the 12th and 28th Brigades took up intermediate positions at Trolak and Slim River respectively. In essence, the Trolak/Slim River position occupied about 14 miles in depth, along the length of the trunk road. Again the Japanese tried to outflank the entire position by an amphibious landing at Kuala Selangor, but the attempt was repulsed by British artillery. On the trunk road, the 42nd Regt, supported by tanks, was ordered to force the British positions — this time being given considerable support by Japanese aircraft which were now able to turn their attention away from the devastated RAF.

The ensuing battle was characterized by the same misfortunes that plagued the British from the beginning of the campaign: poor communications; rumor; hastily organized anti-tank defenses; bad flank security; and surprise. On the 7th of January, the Japanese struck hard. The 12th Brigade had been given only 24 mines (out of 1,400 at division), which proved to be the most effective weapons against Japanese tanks. Soon, however, the Japanese discovered loop roads which went around British blocking positions and continued their advance at an even faster pace

*One of Singapore's 15" naval guns adapted for coastal defense.*





against battalions which had no mines at all. Units were surprised, overrun, cut off, and dispersed. The 12th and 28th Brigades could only muster 20 per cent of their personnel on the following day.

### Gemas

Coincident with the Slim River debacle, Lord Wavell arrived in the Far East to take charge of a new Allied organization, the American-British-Dutch-Australian Command (ABDA), encompassing Malaya, Indonesia, northern Australia, and the Philippines. He was fearful that further delaying actions would result in the disintegration of the 11th Indian Division once the Japanese reached the more open terrain of southern Malaya. Accordingly, the major city of Kaula Lumpur was abandoned, and the 11th Division joined the 22nd Australian Brigade in forming a defensive position along the line Mersing-Kluang-Batu Pahat, while Gordon Bennett was ordered to further delay the Japanese at Gemas with an *ad hoc* formation christened Westforce (27th Australian Brigade, 9th Indian Division, and 45th Indian Brigade). Gordon Bennett was not convinced of Japanese invincibility, and indeed had been highly critical of the British conduct of the campaign. He was chaffing to get into action and show what his Australians could do. Meanwhile, the Japanese had been reinforced by the 5th Guards Regt and the 21st Regt of the 5th Division, and the British 53rd Brigade had landed at Singapore — less its artillery and transport, due the next week.

As another Japanese amphibious move (to Port Swettenham) had failed to find the British flank, the 5th Division pressed down the trunk road to regain contact. Gordon Bennett organized a carefully planned ambush which was executed by the 2/30th Australian Battalion and resulted in staggering Japanese casualties. The advance was momentarily checked by the Australians who suffered only 75 casualties.

The Japanese spearhead (1st Tank Regt supported by motorized infantry, machineguns and artillery) had to be reinforced by the 11th Infantry Regt, and the entire 21st Brigade had to undertake a flank march just to regain forward movement. Unfortunately, the minor tactical success at Gemas was more than offset by the loss of the 45th Brigade, a raw unit raised in August of 1941, which was guarding Westforce's seaward

flank at Muar. Infiltrated and encircled by the 4th and 5th Guards Regt, the brigade fought a delaying action in the direction of the main British lines. Several attached Australian units stiffened the Indians, but finally they were overwhelmed. Only 900 men escaped death or capture, but the brigade had taken out the equivalent of one Japanese battalion and a tank company. With the Japanese now in a position to cut off Westforce, Gordon Bennett withdrew toward the III Corps defense line.

### To the Island

On the 20th of January, Wavell visited Singapore and instructed Percival to hold on in southern Johore for as long as possible, and prepare for defense of the island. He was concerned that his previous instructions about fortifying Singapore's north shore had not been carried out. On the mainland, the Japanese advance on the west coast still threatened to cut off Gordon Bennett's retreating force, so the 15th Brigade was ordered to hold Batu Pahat to prevent such a further debacle. The 15th Brigade bought the requisite time, but was itself cut off and had to abandon its heavy equipment in an escape attempt. About half the brigade succeeded in reaching the British lines.

Percival now reorganized his army into three groups, each of which could retire to Singapore along a separate line of communications: Eastforce (along the east coast), Westforce (in the center), and 11th Indian Division reinforced by 53 Brigade (on the west coast). Continued Japanese pressure forced Percival to order Heath to retreat to the island on the 27th of January. Eastforce had little trouble withdrawing, the 22nd Australian Brigade giving the Japanese a bloody nose like the 27th had at Gemas. On the opposite coast, the 11th Division completed its retreat, though at the cost of losing half of the 15th Brigade and the heavy equipment of the 53rd.

The central sector saw a calamitous withdrawal by Westforce in which the 22nd Indian Brigade was lost. The retreat was supposed to be accomplished by moving the 27th Australian Brigade down the trunk road and the 9th Indian Division down the railroad line. Since there were no roads adjacent to the railroad at this point, however, the rearguard 22nd Indian Brigade had to

send its transport and heavy equipment across to the trunk road and then defend its position with whatever it could carry. When a bridge behind the brigade was inadvertently blown up, it lost both its capability to be supplied by rail and its communications with the 8th Brigade to the south. On instructions from division, the brigadier could not withdraw until ordered.

On the night of the 27th of January, the advancing Japanese interposed themselves between the 8th and 22nd Brigades, cutting off the latter. Unable to break out by attacking, the commander of the 22nd ordered his units to take to the jungle. Very few escaped the Japanese net. On the 31st, the last British troops evacuated the mainland, piped across the Johore Causeway by the Argylls' two surviving bagpipers.

### The End on Singapore

As Yamashita marshalled his forces for the inevitable assault, the forces on Singapore braced to receive it. Over the previous few weeks, the garrison had been reinforced by the remainder of the British 18th Division (54th and 55th Brigades) and another weak Indian Brigade (the 44th). Replacements destined for Australian and Indian units proved worse than useless. Many had little more than basic training and no unit training. The heavy guns of the "fortress" pointed mainly seaward, and there was little high explosive ammunition with which to engage troops.

Over the protests of his staff, Percival concentrated the few stocks of fortification materials on the northeast part of the island. In all, Percival had 13 brigades, most of which (except for the recent British arrivals) were seriously depleted. Yamashita had 31 battalions at his disposal, which had suffered relatively few casualties and were high in morale. The Japanese combat strength was still equal to or inferior to that of the British, since they had advanced so rapidly down the peninsula that they had completely outrun their supplies.

Percival disposed his forces with the 18th Division in the northeast part of the island, the 11th Division opposite the causeway, and the 8th Australian Division in the northwest. The garrison covered the southern half of the island and the 12th and 15th Brigades were retained in reserve. To maintain Percival's belief that the northeast would be the area of attack, Yamashita launched a feint with the Imperial Guards on the evening of the 7th of February, in the vicinity of Palau Ubin.

The main assault fell on the 22nd Australian Brigade on the night of the 8th/9th. Although a heavy toll was taken as the Japanese crossed the Johore Strait, muddled coordination on the Commonwealth side over illumination and heavy weapons fire, combined with local numerical inferiority, assured the Japanese a foothold. The first wave consisted of 16 battalions of the 5th and 18th Division, (with 5 more in reserve) concentrated on a four and a half mile front. On the night of the 9th/10th, the Guards launched a supplementary attack to clear the causeway for engineer and tank traffic. Percival's half-hearted efforts to respond to the attack failed to eject the Japanese, and the 22nd Australian Brigade was virtually destroyed. A withdrawal to the so-called Jurong Line was carried out but, due to further muddled orders, the Japanese breached this potential obstacle as well.

With the arrival of Japanese armor, the situation deteriorated more rapidly than expected. Percival ordered a further withdrawal to a defensive perimeter around the city. Gambling that the British were near collapse, Yamashita decided to go for broke. He fired artillery ammunition as if he had an endless supply of shells, and pushed his

Vickers Vildebeest torpedo bomber on patrol above Singapore.





troops to the limit. He knew that if Singapore did not fall rapidly he would be in trouble. Dreading the prospect of protracted fighting in the city — where his tanks and aircraft would lose their advantage — he demanded immediate and unconditional surrender. Percival had his back to the wall. Churchill wanted a "last stand" in the best

traditions of the Empire, but the Japanese had captured Singapore's water supply, placing in peril the civilian population, which had been swollen by hundreds of thousands of refugees. Wavell allowed Percival discretion in handling the situation, and the latter therefore took the first opportunity to capitulate. What Yamashita would later call his

"greatest bluff" had succeeded. The prestige of a century and a half of white rule had collapsed in just ten weeks. It would never be restored. For the survivors of Singapore, the agony of the campaign would be overshadowed by even greater ones: captivity in the hands of the Japanese and the construction of the Burma Railway. □ □

## ORDERS OF BATTLE

### BRITISH ORDER OF BATTLE

7 December 1941

#### MALAYA COMMAND

##### Singapore Fortress

1st Malaya Infantry Brigade (Singapore)  
2nd Malaya Infantry Brigade (Singapore)  
Fixed Defenses (Singapore)

##### 8th Australian Division

22nd Australian Infantry Brigade (Mersing/Endau)  
27th Australian Infantry Brigade (Kluang/Mersing)

##### Command Reserve

12th Indian Infantry Regiment (Port Dickson)

##### III Indian Corps

9th Indian Division: 8th Indian Infantry Brigade (Kota Bharu); 22nd Indian Infantry Brigade (Kuantan)

11th Indian Division: 6th Indian Infantry Brigade (Jitra); 15th Indian Infantry Brigade (Jitra)

##### Penang Fortress

Airfield Defense Troops: 3 × battalions

##### Kroh Column

Corps Reserve: 28th Indian Infantry Brigade (Ipoh)

##### Volunteer Forces

Federated Malay States Volunteer Force Brigade

Straits Settlements Volunteer Force Brigade

##### BRITISH REINFORCEMENTS

##### 18th British Division

53rd British Infantry Brigade  
54th British Infantry Brigade  
55th British Infantry Brigade

and...

44th Indian Infantry Brigade  
45th Indian Infantry Brigade

##### POTENTIAL ADDITIONS TO BRITISH GARRISON

20th Indian Infantry Brigade (to 9th Indian Division)

23rd Australian Infantry Brigade (to 8th Australian Division)

##### POTENTIAL BRITISH REINFORCEMENTS

##### 6th Australian Division

16th Australian Infantry Brigade  
17th Australian Infantry Brigade  
19th Australian Infantry Brigade

##### 7th Australian Division

18th Australian Infantry Brigade  
21st Australian Infantry Brigade  
25th Australian Infantry Brigade

and...

46th Indian Infantry Brigade  
7th British Armored Brigade

### JAPANESE ORDER OF BATTLE

#### 25th ARMY

##### Imperial Guards Division

3rd Guards Infantry Regiment (less 2 bns)  
4th Guards Infantry Regiment  
5th Guards Infantry Regiment

##### 5th Division

9th Infantry Brigade: 11th Infantry Regiment;  
41st Infantry Regiment  
21st Infantry Brigade: 21st Infantry Regiment;  
42nd Infantry Regiment

##### 18th Division

23rd Infantry Brigade: 55th Infantry Regiment;  
56th Infantry Regiment

35th Infantry Brigade: 114th Infantry Regiment;  
124th Infantry Regiment (absent for invasion of Borneo)

##### 3rd Tank Group

1st Medium Tank Regiment

6th Medium Tank Regiment

14th Light Tank Regiment

2nd Medium Tank Regiment (detached to 16th Army in January)

##### Supporting Arms

Anti-Tank: 1 × battalion; 8 × independent companies

Mountain Artillery: 1 × regiment

Heavy Artillery: 2 × regiments; 1 × battalion

Mortars: 3 × battalions

Anti-Aircraft: 4 × battalions; 3 × companies

Engineers: 3 × regiments; 3 × companies

plus... Military Police, Railway, Signals, and Line of Communications units

##### POTENTIAL JAPANESE REINFORCEMENTS

##### 56th Division

146th Infantry Regiment

148th Infantry Regiment

154th Infantry Regiment

□ □





# AIR FORCES

Control of the air quickly proved decisive in the Malayan campaign. Japanese Army and Navy air contingents outnumbered the Royal Air Force and most often flew superior aircraft as well. With mastery of the air, the Japanese could provide close support to their ground units and undertake "strategic" raids against Singapore City. Although accurate air support was difficult in jungle and plantation areas, and air/ground liaison nearly broke down alto-

gether on Singapore island, the constant presence of Japanese aircraft had an overwhelming psychological effect on the predominantly raw defenders.

British aircraft were under the control of Headquarters Royal Air Force, Far East, which directed squadrons from the Royal Australian and Royal New Zealand Air Forces (and a few Dutch units after the outbreak of war) as well as those of the RAF. Squadrons consisted of one type of aircraft with associated maintenance personnel, and generally numbered between 12 and 16 operational planes, classed as "initial equipment." Spare

aircraft, nominally under squadron control as "immediate reserve," were held centrally by RAF HQ. As a result of its low place on Britain's priority list, Malaya had to make do with obsolescent equipment. Planes such as the Brewster Buffalo, dumped on the British and Dutch by the US after unsatisfactory performance trials, were deemed adequate to deal with the Japanese by Britain's Chiefs of Staff. In practice, the Buffalo proved no match for the nimble Zero. Low priority also aggravated the shortage of spare parts and tools, causing a maintenance nightmare for ground crews in Malaya.

## JAPANESE AIR STRENGTH Malaya Area of Operations, 7 December 1941

FORMATION	FIGHTERS	BOMBERS	RECCE	FLOAT	TOTAL
3rd Air Division	146	172	36	-	354
22nd Air Flotilla	36	138	6	-	180
Tenders	-	-	-	30	30
<b>Totals:</b>	<b>182</b>	<b>310</b>	<b>42</b>	<b>30</b>	<b>564</b>

## BRITISH AIR STRENGTH AND ORGANIZATION Malaya, 7 December 1941

SQUADRONS	AIRCRAFT	ON LINE	SPARE
27, 34, 60, and 62 RAF	Blenheim	47	15
243 RAF; 21 and 453 RAAF; 488 RNZAF	Buffalo	60	52*
1 and 8 RAAF	Hudson	24	7
36 and 100 RAF	Vildebeeste	24	12
205 RAF	Catalina	3	2
<b>Total:</b>		<b>158</b>	<b>88</b>

\*21 of these unserviceable due to engine problems. **Note:** The RAF was reinforced by 52 × Hurricanes during the campaign, which arrived crated at Singapore too late to influence the air war.

## PRINCIPAL AIRCRAFT OF THE MALAYA CAMPAIGN

NAME	TYPE	YEAR	ENG	MPH	CEILING	RANGE	GUNS	BOMBS	NOTES
<b>British</b>									
Buffalo I	F	1941	1	295	33,200	759	4 × .50"	-	US design
Hurricane II	F	1941	1	342	35,600	970	12 × .303" or 4 × 20mm	-	
Blenheim I	NF/LB	1937	2	265	27,280	920	2 × .303"	1,000	
Blenheim IV	NF/LB	1939	2	266	22,000	1,457	5 × .303"	1,320	
Vildebeeste III	TB	1931	1	137	13,500	970	2 × .303"	1,870 or 1 × torpedo	
Hudson II	B	1939	2	225	25,000	1,540	4 × .50" 3 × .303"	950	US design
Catalina	FB	1941	2	177	18,100	1,395	2 × .50" 2 × .303"	2,000	US design
<b>Japanese</b>									
Nate	F	1939	1	250	32,000?	540	2 × 7.7mm	-	Army 97
Oscar 2	F	1940	1	325	38,500	950	2 × 12.7mm	-	Army 1 Mk II
Zeke 2	F	1940	1	335	32,810	885	2 × 20mm 2 × 7.7mm	-	Navy Zero Mk II
Mary	LB	1938	1	225	29,265	665	3 × 7.7mm	660	Army 98
Babs	RB	1940	1	225	31,430	590	3 × 7.7mm	330	Navy 98
Sally 2	B	1941	2	294	32,810	1,635	6 × 7.7mm	2,200	Army 97 Mk III
Nell	B	1937	2	270	29,950	2,125	4 × 7.7mm 1 × 20mm	1,100	Navy 96
Betty	B/TB	1941	2	283	29,000	3,075	5 × 7.7mm 2 × 20mm	2,200 or 1 × torpedo	Navy 1

### NOTES:

**Name:** As designated by the Allies. **Type:** F, fighter; NF, night fighter; LB, light bomber; TB, torpedo bomber; B, bomber; FB, flying boat; RB, reconnaissance bomber. **Year:** Date

model entered series production. **Eng:** Number of engines. **MPH:** Max speed in miles per hour. **Ceiling:** Maximum altitude in feet (operational ceilings usually less). **Range:** Maximum straight-line distance in miles with

normal ordnance load. **Guns:** Normal machinegun/machine cannon mountings. **Bombs:** Typical bomb load in pounds. **Notes:** Includes official Japanese designation.



Japan's air forces were divided into two separate arms, one belonging to the Army and the other to the Navy. The Army Air Force provided ground support through formations known as air divisions. Each air division controlled two or three air brigades, which in turn controlled three or four air regiments. Although divisions and brigades were composed of different types of aircraft, regiments usually operated 27 to 48 planes of a single classification. Normally, three squadrons constituted a regiment, with fighter squadrons holding around 16 planes and bomber formations holding 9 to 12 aircraft, depending on the type.

Each division carried a number of airfield battalions in its organization, which were highly mobile units capable of supplying and servicing aircraft and defending air strips. These battalions were instrumental in maintaining the fast pace of Japanese air operations and the rapidity of base changes called for in the campaign.

The Japanese Naval Air Force was responsible for fleet aviation, coastal operations, convoy cover, and limited ground support. The basic unit was the air group, a self-contained and sustaining organization which varied in strength from 18 to 84 aircraft, depending on type. Groups would be organized into an air flotilla of 60 to 150 planes under a Rear Admiral.

Although the Japanese air services had excellent equipment at this stage of the war, the Japanese economy could not sustain a long-term replacement effort and improve the quality of materiel throughout the war. Similarly, the superb training of Japanese pilots (particularly naval aviators), which often absorbed three years in peacetime, could not keep pace with the high intensity of wartime losses. In sum, the Japanese were geared for a *Blitzkrieg* of short duration.

## JAPANESE AIR ORDER OF BATTLE 7 December 1941

### ARMY AVIATION

#### 3rd Air Division

3rd Air Brigade (1 × fighter and 3 × light bomber regiments)

7th Air Brigade (1 × fighter and 3 × heavy bomber regiments)

12th Air Brigade (2 × fighter regiments)

15th Independent Air Unit (2 × reconnaissance squadrons)

81st Reconnaissance Regiment (—) (1 × reconnaissance squadron)

### NAVAL AVIATION

#### 22nd Air Flotilla (+)

Mihoro Air Group (light bombers)

Genzan Air Group (light bombers)

Kanoya Air Group (light bombers)

HQ Air Group (fighters and reconnaissance)

### Seaplane Tenders

Kimikawa Maru

Sanyo Maru

Sagara Maru

□ □

## ORGANIZATION OF GROUND FORCES

The diagram (see page 46) of the organization of a British division represents the "standard" structure for this time period. Due to active war commitments in North Africa and the Middle East, however, such extravagant scales could not be extended to the Far East which, in 1941, was only a secondary theater of operations. The three divisions forming the Malaya garrison (9th and 11th Indian and 8th Australian) had only two brigades each instead of the customary three. Divisional specialist units such as anti-aircraft, reconnaissance, and machinegun battalion were non-existent, and anti-tank units were severely cut back. Divisional artillery battalions (known as "field regiments") were similarly reduced in number and scale, with two regiments holding 16 guns instead of 24; one Australian regiment being armed with mortars, and another with obsolete 18-pounder guns instead of modern 25-pounders; one field regiment being replaced by a mountain regiment (with small, light pieces), and another absent from the order of battle altogether.

The division would often be divided into smaller combined arms teams known as "brigade groups." Each of these consisted of an infantry brigade (3 × battalions), an artillery regiment or battery, and a slice of all the other divisional combat support units. The basic tactical unit was the battalion, composed of a headquarters company and four rifle companies. It was in the battalion that the *esprit de corps* of the British Army was, and still is, fostered and refined to a high degree. Unfortunately, many of the units in Malaya had little time to indoctrinate their soldiers effectively. This, coupled with a crippling lack of practical training, marred the professional reputations of many famous units during the ensuing debacle. Additionally, quite a few of the Indian battalions were deficient in numbers of heavy weapons (machineguns, mortars, and anti-tank weapons) which contribute disproportionately to a unit's firepower.

In 1941, two divisional organizations existed in the Japanese Army: the "triangular" and the older "square" formation. Triangular divisions were similar to those of the Allies,

consisting of three infantry regiments, each of three battalions, and divisional support troops. The square division, being gradually phased out by this time, held four infantry regiments which were controlled by two brigade headquarters. In both divisions, the assignment of specialist units (artillery, engineers, service support, etc.) depended upon the mission of the division and the area where it was to be employed. Japanese infantry regiments had a firepower edge on their British counterparts (brigades) in the inclusion of a regimental gun unit for close support. Additionally, Japanese battalions were stronger, deploying four rifle companies, a machinegun company, and a battalion gun company. Divisional artillery regiments usually consisted of two field gun battalions (75mm) and one howitzer battalion (105mm). Non-divisional supporting artillery used in Malaya consisted of mountain artillery regiments (36 × 75mm mountain guns) and heavy artillery regiments (24 × 150mm guns or howitzers in two battalions).

Another determinant of the actual ration strength of Japanese formations was the transport status of the division — motorized or horse drawn. The actual regimental strength in the two motorized divisions (Guards and 5th) ran about 2,600, while the horsed 18th division carried 3,525 men per regiment. The full strength of each Japanese division (prior to wartime detachments) is provided:

**5th Division** (motorized/square): *PERSONNEL*: 15,342; *VEHICLES*: 1,008; *HORSES*: None.

**Guards** (motorized/triangular): *PERSONNEL*: 12,649; *VEHICLES*: 914; *HORSES*: None.

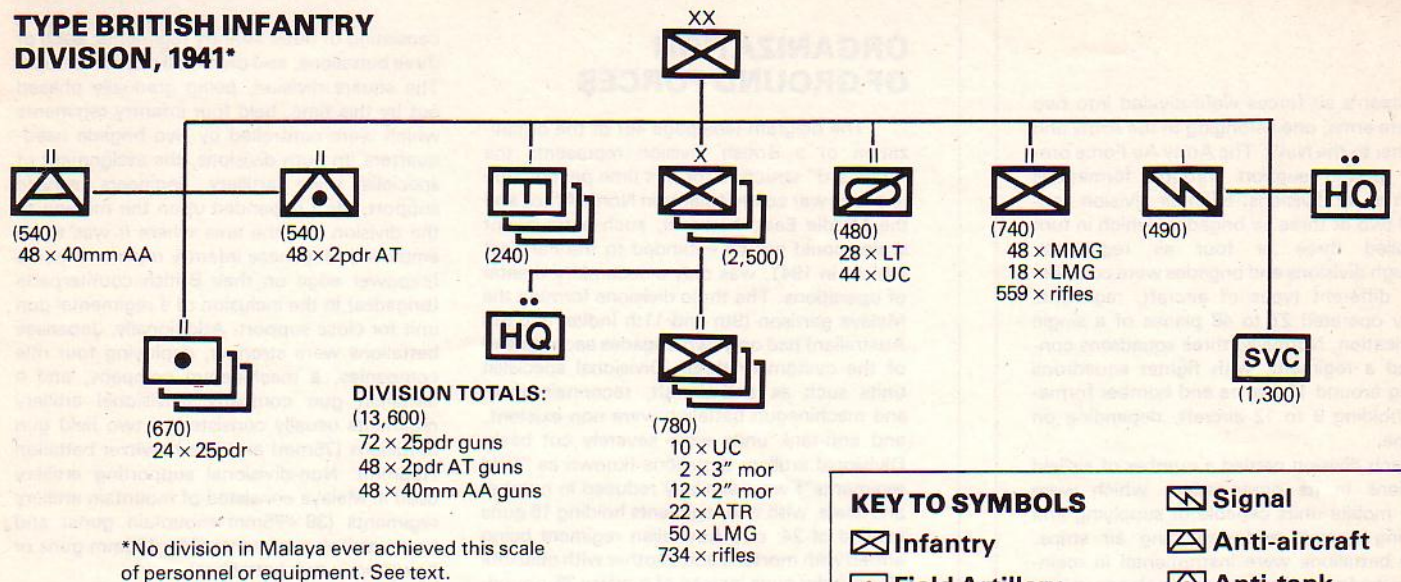
**18th** (horsed/square): *PERSONNEL*: 22,206; *VEHICLES*: 33; *HORSES*: 5,707.

The 3rd Tank Group contained about 79 medium and 100 light tanks as well as 238 halftracks and other vehicles. The Japanese usually operated their armor in company strength (10 × medium and 2 × light tanks per medium company; 10 × light tanks per light company), generally with a battalion of motorized infantry or a reconnaissance battalion for support. The standard 16-ton medium tank mounted a 57mm main gun and two 7.7mm machineguns, while the 8-ton light tank carried a 37mm main gun and one 7.7mm machinegun.

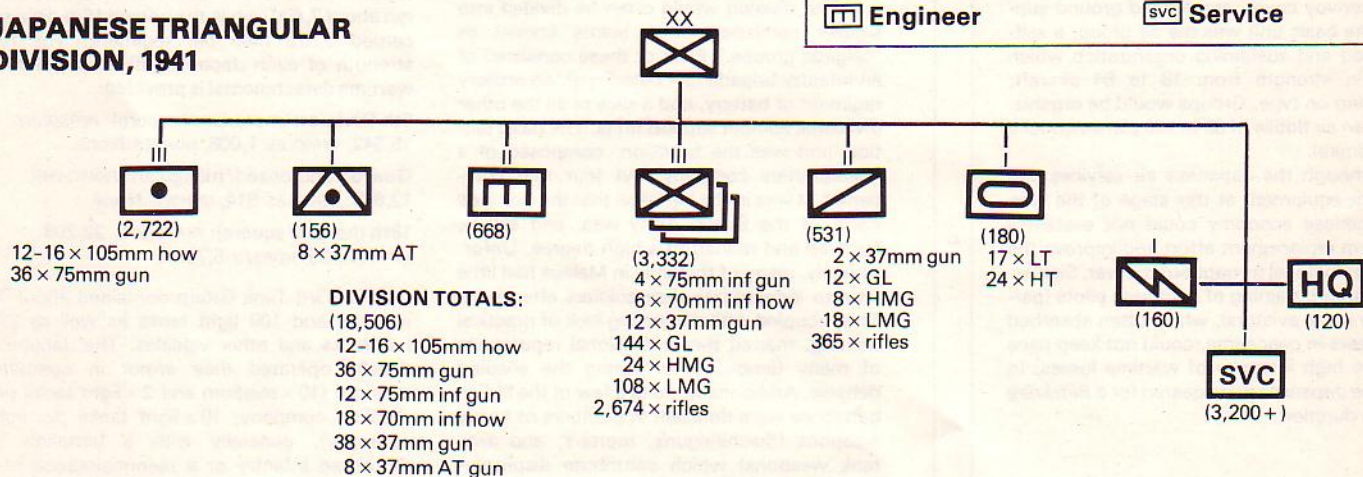




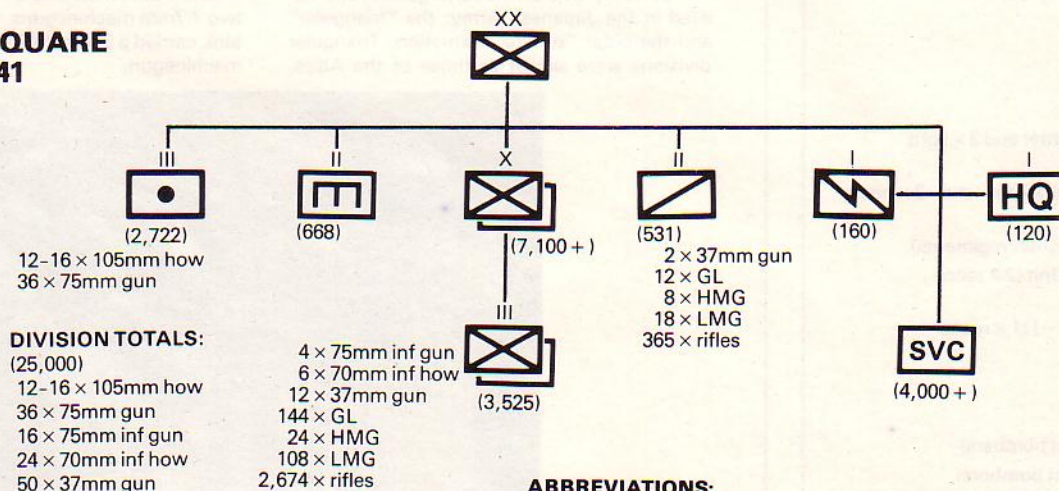
## TYPE BRITISH INFANTRY DIVISION, 1941\*



## JAPANESE TRIANGULAR DIVISION, 1941



## JAPANESE SQUARE DIVISION, 1941

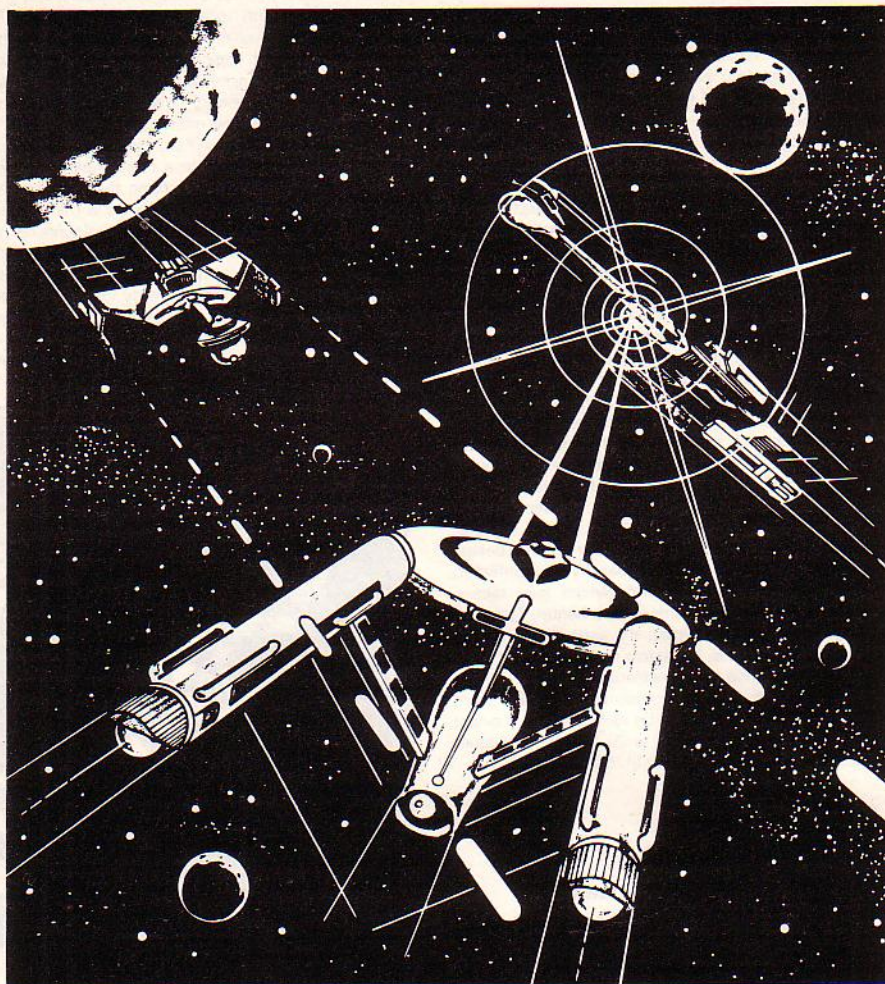


### ABBREVIATIONS:

AA: Anti-aircraft. AT: Anti-tank. ATR: Anti-tank rifle. GL: Grenade launcher. HMG: Howitzer. HT: Halftracks and other vehicles. Inf gun/how: Infantry gun or howitzer made for light close support. LMG: Light machinegun. LT: Light tank. MMG: Medium machinegun. Mor: Mortar. Pdr: Pounder (British gun designation by weight of projectile). Rifle: Bolt-action rifle. UC: Universal carrier (Bren gun carrier), a light British armored tracked vehicle, usually mounting one LMG. ■■



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# Briefings

## Briefings One: Recently Published Adventure Games

Initials after each review indicate the name of the reviewer as follows: JHB (John H. Butterfield); BSM (Bruce S. Maxwell); and DJR (David James Ritchie).

**Assault on Tobruk** (Simulations Canada, P.O. Box 221, Elmsdale, Nova Scotia, Canada B0N 1M0, \$14) Rommel on the Rim. A simple, snappy, tactical simulation of Rommel's successful assault on the Tobruk perimeter on 20 June 1942. The game contains a 22" x 28" two-color map, a 9-page rules booklet, and 255 counters. The units are company level, each turn represents two hours, and the scale is 650 meters to a hex. The Sequence of Play runs as follows: Bombardment Phase, Movement Phase, Combat Phase, and a further Movement Phase. Each unit possesses an anti-tank strength and an anti-infantry strength. The game has an operational feel to it, with combat allowed only between adjacent units. Special rules cover combined arms combat, engineer units, and strongpoints. The game includes a nice variety of combat results: destruction, capture, retreat, exchange, and suppression. The rules are easy to learn and all scenarios, whether historical or alternative, last only 8 game-turns. The game is simple to play yet attains a commendable degree of realism. Overall, a nice job. Designed by Stephen M. Newburg. (BSM)

**Campaigns of Napoleon** (West End Games Inc., P.O. Box 156, Cedarhurst, NY 11516, \$15) State of the art Napoleonic! Every once in a while, a game comes along which alters the standards by which we judge games. If *Campaigns of Napoleon* is not such a game, it should be. Veteran designer John Prados (*Third Reich*, *Cassino*, SPI's upcoming *Spies*, among others) has put together a relatively simple, but richly chromed study of the campaigns in central Europe between 1800 and 1815. All of the classic elements which we have come to expect from "maneuver" games of this era are present (e.g., forced march, attrition, leadership, siege, supply, fortification, special units, diplomacy, etc.). However, the designer's treatment of most of these elements is novel enough to impress even the most jaded grognard. For example, there are three types of overrun to choose from, depending upon whether the overrunning force wishes to bypass entirely, partially engage or completely destroy a small blocking force. Other especially nice rules include defensive reaction movement (allowing battles to be reinforced), concentration areas (which are as important as capitals and allow some variations in where an operation is actually based from), an extensive mobilization system, a nifty cavalry screening system, and a wonderfully abstract rule portraying the effects of British control of the seas.

The game is not entirely without flaw, of course. Trade-offs have had to be made between scope and scale so that Spain and Russia are not included on the map-sheet and it is impossible to conduct a grand strategic game lasting a period of many years (*la la War and Peace*). The benefit gained from this trade off is, of course, that *Campaigns of Napoleon* is able to provide a better feel for operations than a similarly sized game using a different scale would have. On balance, the designer made the best decision in this case by limiting his scope, but the necessity of making such trade offs is nonetheless saddening. In addition, there are an annoying number of errors in the map and counters, though West End (which must have a longer lead time than the rest of us mortals) has admirably handled the problem by setting aside a section of the rules for counter and mapsheet errata. I would like to see some other large companies follow a similar policy.

On balance, none of the flaws in the game are, at a glance, serious. The whole is a pleasing and well-integrated product showing an admirable balance between playability and accuracy and blessed with just the right amount of innovation within a classic framework.

*Campaigns of Napoleon* comes attractively boxed with 400 counters, a colorful 22" x 34" heavy paper mapsheet, two cards of formatted material, a plastic counter tray, one die, and a 40-page booklet of rules and a dozen campaigns and scenarios. (DJR)

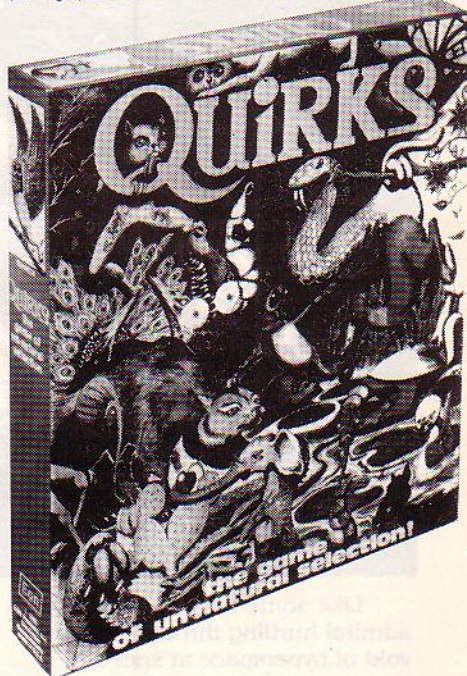
**Dark Stars** (Simulations Canada, P.O. Box 221, Elmsdale, Nova Scotia, Canada B0N 1M0, \$14) Strategic/tactical game of exploration and conflict in a globular cluster for two to four players. Includes one two-color 22" x 28" game map, 255 four-color cardboard counters printed on one side only, and a 20-page 5" x 8" rules booklet in a one inch box. Each player represents one of three races indigenous to the area. A fourth player may represent the Terrans (who come from outside the cluster via black hole travel). The interstellar playing area takes up two thirds of the game-map and shows an array of stars, each classified by spectral type, and dust clouds, which inhibit movement. In each Interstellar Game-Turn, the players receive economic points from the star systems they control, produce spacecraft, increase the tech levels of their systems, check for stability of their systems, and then plot movement of their spacecraft. Each player moves his units in a different manner (although all plot simultaneously) to simulate different propulsion methods developed by each race. Movement is three dimensional, as in *StarForce*. If a spacecraft is moved into a star systems hex and/or a hex occupied by another player's units, a "mini-game" is played out on the interplanetary hex display. The planets of the system are deployed on the display and the involved players plot moves, explore, construct orbital or planetary economic or defense bases, conduct diplomacy, and have combat. When conflict in all contested systems is resolved (which may take a while), another Interstellar Game-Turn is begun. The rules are complete but poorly written; the large blocks of tiny type are hard on the eyes. The game has many good ideas (although acceleration and deceleration movement requirements in a Game-Turn representing 20 years seem unnecessary). Much time must be invested; the shortest scenario of the four presented is 20 Interstellar Game-Turns long. Designed by Stephen M. Newburg. (JHB)

## Briefings Two: Recently Published Selected Non-Wargames

**Swashbuckler**, by Thomas O'Neill, is one of a series of compact "Album Games." The inside of the jacket serves as the playing board, and the components are stored in the slots normally reserved for records (although I prefer to store the counters elsewhere so as not to bend the board out of shape). This game allows from two to six players to experience a 17th Century tavern brawl or a battle between the crews of fouled pirate vessels — each on a separate portion of the board. In the tavern scenario, furniture in the form of tables, chairs, mugs, shelves, carpets, and chandeliers is placed round about the room. Later, these items are shoved, flipped, toppled, yanked, and swung upon with the object of inflicting mayhem on an opponent. In the pirate scenario, only cannons, spars, and treasure chests (one of the latter per ship) are placed. But since ropes are available everywhere, characters can swing to their hearts' content. Each player controls two or more characters. These are armed with swords, daggers, and hats which can be waved to stun an opponent. Each turn consists of six steps. Players secretly write orders for each step, but there is a strict order of precedence as to how action, swordplay, and movement orders are to be executed. Dice throws, referred to convenient tables, indicate whether an opponent has been hit and, if so, further throws indicate the extent of the damage — anything from being stunned to a bodily injury, which is recorded on the character's profile. A game runs for a maximum of ten turns. In the tavern, every player is for himself. If one has more surviving characters, he wins. If the number is equal, the one with the least total injuries wins. The pirates are divided into two teams, and a team wins at once if able to bring both treasure chests onto their ship. Otherwise surviving characters or total injuries decides the winner. (Yaquinto Publ. Inc., P.O. Box 24767, Dallas, TX 75224. \$7.00 + \$1.00 postage per order)

**Hero**, by Michael Matheny, is an "Album Game" for two or three heroes in search of the fair Alysa's hand. Each hero is in his own section of the catacombs, struggling against myriad monsters, placed and manipulated by an opponent. To start, each player sets up his hero's profile, allotting 70 points at will among the following areas: physical appearance; intelligence; class; strength; luck; the number of hits he can take; weapons proficiency; and

movement — which includes actions other than simply moving. One hundred and one points would purchase top levels in all categories. A player's choices are recorded with counters on his Hero Set-Up Sheet. Players attempt to reach Alysa's room as quickly as possible, but may be forced to fight with monsters along the way. These monsters are all unknown at the start, but are turned face up as they would logically become visible. Certain counters are never faced until the hero lands on them. They can be gold or jewels — or something particularly deadly. All encounters are resolved by dice, but the hero's profile is a definite factor. A hero's progress is also slowed by monsters blocking doors; a combination of strength and dice throw is needed to open them. If one player reaches Alysa's room and is not joined within four turns, he wins. Otherwise each entering player figures his heroic total — which is based on the monsters slain (but this is reduced if he unheroically wore armor), the riches he brought with him, and a personality factor. If one player does not have a 30 point edge, Alysa chooses the hero with the most class (a category completely useless in the catacombs). Physical appearance is the next tie breaker, and finally the dice. (Yaquinto Publ. Inc., \$7.00 + \$1.00 postage per order)



**Quirks**, by Bill Eberle, Jack Kittredge, and Peter Olotka, is a light-hearted look at Darwin's theory. One hundred and eight trait cards are divided into plant tops, middles, and bottoms and into animal heads, bodies, and tails. The animal heads are further divided into herbivore and carnivore. A marker, which players can move slowly or quickly along a continuous track, sets the climate as ocean, forest, plains, desert, or jungle. Each section of plant or animal (each card, that is) has a value between zero and five which varies according to the prevailing climate. Information on a card gives a clue to its value, but the actual figure must be determined from the secret Trait Value List. Coding with three colors indicates which plants are edible to a herbivore, and which herbivores are edible to a carnivore. To start, a plant, an herbivore, and a carnivore are randomly formed and placed in the upper niches. Three partial organisms (which are completed at the time of a challenge) are placed below these, in the lower niches. The six are divided between the two to four players. Playing from a hand of nine cards, players can mutate their organisms to make them stronger, can challenge an organism in the lower niche with one from their hand, and/or challenge an upper niche organism with a lower. The value of an organism is the total of the three cards — plus or minus points if it can eat or can be eaten by a neighbor. A player may withdraw from a challenge, conceding victory to the opponent, before the strengths are determined. If the challenge goes to the end, the losing organism is extinct, and a player with three extinct organisms is out of the game. A player wins by being the lone survivor, or by owning all three upper organisms and defending them for one round. Also includes a solitaire and a simplified version for children.



(Eon Products, 96 Stockton Street, Dorchester, MA 02124. \$12.00 + \$1.00 postage.)

**Leverage** is a well-balanced game of strategy for two. The pivoted board is perforated with a 14 x 9 grid of holes. At each end, nine neutral colored Point Pieces are inserted. Next to these are Safety Zones enclosing three, five, and seven holes. Each player fills the safety zone at his end with "combat pieces" of his color — three large, five medium and seven small. On a turn a player moves a piece one hole in any direction including diagonally, or makes a jump or series of jumps. Small and medium pieces can jump over pieces belonging to either player; large pieces are removed when jumped (except in either safety zone). Small pieces are never removed. When, at the end of a player's turn, the board is tilted down at the far end, point pieces may be taken one at a time until the board lifts (the engineering is such that there is never any doubt). If, as sometimes occurs, a player causes his end of the board to drop, the opponent takes point pieces. When one player moves all his remaining pieces into the enemy safety zone the game ends and the player with the most points wins. With equal points the player moving wins. Three variations are included that change the tempo of the game. (Just Games, 31 Hilton Ave., Garden City, NY 11530. \$13.00 + \$2.00 postage.)

**Word Rummy** should really be called *Word Rummy Plus* to differentiate it from previously published games of the same name. Players, from two to four, are dealt hands of seven cards. On a turn a player has three options. He can lay down one word of three or more letters. He can add one or more letters from his hand to a word already played and, using all the letters, form a word with a different meaning; if done to an opponent, the word is stolen. Finally, he can simply discard a letter. Whichever option is used, the player draws a card or cards from the deck to return his hand to seven. Play continues until the deck is exhausted — and one player plays out or no further plays can be made. Words score from one point for a three letter word to 25 points for a word of thirteen or more letters. Bonuses are earned for going out, for difficult letters, and for word groups (a set containing a three, a four, a five, and a six letter word — if a seven letter word is also included, there is a bigger bonus). Points are lost for cards remaining in hands. Additional rounds are played until one player reaches a specified total. The manufacturer suggests that up to eight can play with an extra deck. Actually a double deck is also more satisfying with four. (Gabriel. c. \$5.50)

**Over-N-Out** is an attractive memory challenge for two. Each player inserts a series of cylinders, numbered from one to fifteen, face down in an array of holes. Then the board is turned so that the arrays are switched. In turn players lift a cylinder, returning it face down if it is not a one. When a one is discovered, it is placed face up and the player draws another cylinder in the same turn, continuing if it is a two, etc. The first player to reach fifteen scores one point for each of the opponent's remaining face down cylinders, and rounds are played until a player totals 25 points. (Gabriel. c. \$3.50.)

**Jackpot Yahtzee** is a fast-moving game of luck and judgment for two to four players — all, however, playing pretty much on their own. Each player has a vertical rack into which plastic tiles can be dropped. There are five columns, increasing from one up to five positions in a column, for a total of 15 positions. One additional position is provided in which an unfortunate tile can be temporarily stored. Four different symbols are unevenly divided among the faces of four dice. On a turn, a player throws the dice once and — except for four of the same symbol — drops one tile into a position. One pair is the most confining, since that symbol must be dropped. Three of a kind also calls for that symbol, but a filled storage position may first be emptied. Two pairs allow a choice between the symbols. Four different symbols allow a free choice, and four of a kind allows a free choice of two tiles, plus the chance to empty the storage position. With all 15 positions filled, a player scores for horizontal or diagonal rows of three, four, or five of the same symbol. These vary from 30 points for three of the most common symbol to 400 points for five of the rarest. There is also a bonus of 50 points for seven of the same symbol, 70 points for eight, and 100 points for nine or more. (Milton Bradley. c. \$10.00)

**Word Yahtzee** is for from one to four players, and again all play pretty much on their own. Seven dice are provided with lettered faces. The letters are given point values, from one up to 10 for a Z. On a turn, a player throws the dice and can then rethrow any he wishes two more times. There are eight rounds played in rotation, or in any desired order in the advanced game. The first

round scores the value of a two-letter word, the second a three-letter word, up to a six-letter word in the fifth round. The sixth round scores any one word, the seventh any two words (each using different dice), and the eighth any three words. A player may choose to score zero in the current round and instead score on a special line, such as All Consonants, All Vowels, or the high-scoring seven letter Yahtzee Word. (Milton Bradley. c. \$3.50)

**Notes on Rubik's Magic Cube**, by David Singmaster, is a paperback book that anyone who has been driven crazy by the devilish cube needs to help restore his sanity. I don't pretend to have read it all — some of it is mighty rough going — but I have profited from what I have read. There is a section that is guaranteed to get the cube back to its pristine position, although not necessarily with the least number of turns. You are also instructed how to take the darn thing apart and reassemble it — which is probably the easiest way to accomplish the task. There are hints on cleaning, lubricating, and general care of the monster. You will also find some problems, a discussion of pretty patterns, a number of anecdotes, and more. (Enslow Publishers, Bloy St. & Ramsey Ave., Box 777, Hillside, NJ 07205. \$5.95) *Sid Sackson*

## Briefings Three: Selected Books for the History-Gamer

Each review is followed by the initials of the reviewer. JMB (Joseph M. Balkoski); AAN (Al A. Nofi); DJR (David James Ritchie).

**Goodbye Darkness: A Memoir of the Pacific War**, by William Manchester. New York: Little, Brown, 1980. 360 pp. Illustrated, maps. \$14.95.

This work is one of the best books that I have ever read about war. In fact, Manchester is fast-developing into one of my favorite authors; two years ago, I found his *American Caesar* (a biography of General Douglas MacArthur) to be the best pure biographical work that I had ever read. Actually, *Goodbye Darkness* is a totally different type of book, but it is equally fascinating.

Being a military historian, I have always tended to classify new military-related books into one of two broad categories: those that deal with war scientifically, and those that deal with war psychologically or sociologically. *Goodbye Darkness* daringly treads into both categories with equal ease, although it is in the latter role that Manchester achieves his greatest successes. Certainly, there have been numerous historical works in the past that have postulated similar themes, particularly those of Cornelius Ryan, John Toland, and David Howarth. However, *Goodbye Darkness's* combination theme is far more effective and — in my view — much more believable.

I have read only a handful of books in my life that have truly dealt with war's effect on the human spirit in an honest and credible manner. *A Rumor of War* (by Philip Caputo), *Despatches* (by Michael Herr), and *Goodbye to All That* (by Robert Graves) are excellent examples of this genre. Of course, I have never experienced war first-hand, and it is impossible for me to veritably state what is a "credible" book on war and what is not. However, the fundamental fact remains that war deals primarily with death, and any work that does not seriously deal with its profound effect on the human spirit is not "credible" to me.

*Goodbye Darkness* is believable because the Marines that it portrays are not simple automatons or shadows, but people with candid and convincing emotions about war and death. Individually, they are anything but heroic characters. Collectively, Manchester depicts a close-knit primary group that is heroic only because it remains stable under such continually chaotic conditions. The chapter that deals with the American invasion of Tarawa is an effective microcosm of this theme. Tarawa is usually described as a "costly triumph" that paved the way for Marine Corps amphibious doctrine throughout the remainder of the war. However, Manchester paints a picture of the battle from a point of view that I had never before considered, and immediately I have come to behold this struggle in a new, horrific light. The remoteness of this insignificant atoll is effectively contrasted with the gruesome toll of American lives that it took, quickly dispelling the typical philosophy of hindsight that maintains that simply because *Tarawa happened* and America eventually won, it was a necessary and well-planned battle. Essentially, I will never think about the Pacific theater of the Second World War in the same light again.

Manchester's style is extremely fluid and readable. He jumps readily between grand strategic questions, personal reminiscences, and portraits of the Pacific battlefields as they appear today. The latter theme is particularly fascinating, not only because the geography of this whole region is so completely misunderstood by Americans, but also because of the bizarre sociological effects created by the violent confrontation between East and West over such a relatively short period of time almost 40 years ago.

Manchester's attitude is one of intense personal confusion over the subject matter that he so ably discusses. His sentiments vary from profound patriotism to pronounced shame over America's role in the war. Similarly, the author tends to view the Marine Corps and the Japanese with alternating sentiments of love and hate. However, this confusion only makes the book so much the more plausible and trustworthy for me. Without reservation, I recommend this book highly to both the amateur military historian (especially those with an interest in sociological history) and the layman with but little knowledge of the Second World War. (JMB)

**History of Marine Corps Aviation in World War II**, by Robert Sherrod. San Rafael, CA: Presidio Press, 1980. xxvii, 496 pp. Illustrated, maps, tables, appendices, notes, addenda, corrigenda, glossary, and index. No price given.

This work was originally published in 1952. As reissued, it is substantially unchanged, save for about seven pages of addenda and corrigenda. While a useful work so far as it goes, it is thus seriously flawed. A considerable volume of materials on the Second World War have become available since 1952 which are not included. The principal items in the addenda deal with the questions of whether or not Gregory "Pappy" Boyington shot down 28 enemy aircraft and with the peculiar military adventures of the ill-famed Senator Joseph McCarthy. This is not to say, of course, that the work is valueless. Indeed, quite the opposite, as it often deals with neglected operations and events, usually in exhaustive detail. Moreover, it has a very good introductory section on the history of Marine Corps aviation *before* the Second World War. But, and an important "but," it ought not to be used as the sole source for information on this interesting aspect of Marine operations in the war. (AAN)

**The Zulu War: A Pictorial History**, by Michael Barthorp. Poole, Dorset, England: Blandford Press, 1980. 181 pp. Illustrated, maps. \$22.50.

Mr. Barthorp states that his book "makes no claim to break new ground." Mr. Barthorp is a master of understatement. Actually, the book doesn't even rototill the old ground very well. The text is competently written, to be sure. However, the coverage is neither incisive nor comprehensive and the inclusion of the written word may be thought of as the publisher's way of justifying this picture book's outrageous price. The pictures alone certainly do not serve to justify it. For the most part they are the same clichéd "field portraits" we have all seen before, lightened by the inclusion of a few imaginative period sketches and paintings. They neither illuminate nor are illuminated by the text, and I am frankly puzzled as to how some of them were even chosen for inclusion in Mr. Barthorp's work. As for the maps, the inclusion of a scale on one of them might have made it useful (though not valuable) in following the author's narrative, and the others are hardly masterpieces of either rendering or research. Even Zulu aficionados will probably want to avoid this particular wallet pounder and there is virtually nothing here for the more casually interested history buff or gamer. (DJR)

**On the Banks of the Suez**, by Avraham (Bren) Adan. San Rafael, CA: Presidio Press, 1980. xii, 479 pp. Illustrated, maps, tables, index. \$16.95.

*On the Banks of the Suez* is General Adan's personal account of operations on the Sinai Front during the 1973 Arab-Israeli War. While the work concentrates primarily on the activities of the author and the troops under his command, it nevertheless presents a fairly accurate picture of operations on the entire front during the war. And, although it focuses on the actual 20-odd days of combat which began with a serious Israeli defeat and ended with Israeli forces within 100 kilometers of Cairo on the west side of the canal, it also provides considerable background material of an historical and technical nature. Of particular value are a number of chapters and passages in which General Adan analyzes the reasons for the initial Israeli defeat, the respective strengths and weaknesses of the opposing forces, and the theory and practice of desert warfare. Like all generals, Adan never fails to give himself



the benefit of the doubt. On occasion, a hint of tension existing between Adan and some of his fellow commanders manages to creep in. But on the whole, a fine work, with many marvelous battlepieces and an overall tone of immediacy and danger. Worth reading. (AAN)

**The Crossing of the Suez**, by Saad el Shazly. San Francisco: American Mideast Research, 1980. 333 pp. Illustrated, maps, appendices, notes, index. No price given.

General Shazly was Chief-of-Staff of the Egyptian Army during the 1973 Arab-Israeli War. His book is the first account by a prominent Arab military leader to appear on this conflict. Indeed, it is the first by such an individual on any of the Arab-Israeli Wars — all four or five of them, depending on how one counts. But the book presents a problem. It is essentially an anti-Sadat tract wrapped around an account of the preparation for, and the events of, the Egyptian crossing of the Suez Canal on Yom Kippur of 1973 and the subsequent Israeli crossing in the opposite direction some weeks later. One must separate the tract from the history.

The work falls naturally into two parts, the preparation and the execution. The first part is quite good, going into considerable, though not complete, detail on the flaws of the Egyptian army prior to Shazly's assumption of command. He discusses at great length the various measures by which the capacity of the Egyptian Army to wage modern war was raised, with interesting insights into the unique problems engendered by the canal crossing. There is a great deal which touches upon the role of the Soviet Union in the reform of the Egyptian Army, but the author is by no means uncritical of the Russians. This part of the work is undoubtedly the most useful. Such cannot be said of the actual account of the operations, which Shazly presents in diary form — indeed one suspects that the entire book is essentially a reworked diary. While he does give a very good explanation of the Egyptian plans and the various methods by which they managed to fool the Israelis into thinking nothing was afoot, his discussion of the actual operation is seriously flawed. Fantasy occasionally rears its head. Moreover, Shazly makes no use of

available published data, thus flatly stating that the Egyptians killed "thousands" of Israeli troops during the crossing and fighting immediately thereafter. Nor is he completely honest about the Israeli resources available during their crossing of the canal, generally upping the figures considerably.

But most importantly, Shazly totally fails to understand the interrelationship of war and politics. Thus, when he criticizes Sadat for not pulling strong armored forces out of the Sinai to confront the Israeli thrust across the canal, he demonstrates a misunderstanding of the very important political victory which had already been won and which could not be reversed unless the bridgeheads were lost. One does, however, suspect that the main purpose of the work is to further Shazly's political ambitions. This should not be allowed to deter those interested in mid-Eastern affairs from reading this otherwise useful work, provided they use it with care. (AAN)

**Thirty Years War**, by Herbert Langer. New York: Hippocrene Books, 1980. 262 pp. Illustrated, appendix, maps, index, notes. \$35.00.

This lavish volume was obviously intended as an entry in the Christmas coffee table book gift market. As such, it has all of the strengths...and weaknesses...of that category of merchandise. Foremost, *Thirty Years War* is characterized by a stiff price and marvelous production values. Secondly, the text is markedly uninteresting, poorly organized, and of little real utility to anyone seriously interested in the topic. While Mr. Langer is reputedly an expert on the Thirty Years War, his expertise does not shine in this volume. The writing is shallow, anecdotal, and sociological in nature. There is no military information worth mentioning in the seemingly endless series of essays on events which are often peripheral to the great war. Further, the author has eschewed even the most feeble attempt at a coherent narrative of the events of the period, making a totally inadequate table of events in the appendix stand in for the missing substance. Unless you are a fan of 17th Century engraving and painting, you can most certainly find better ways to part with \$35.00. (DJR) ■■

## IMPORTANT ANNOUNCEMENT

### S&T games no longer boxed!

To give you, the reader of *Strategy & Tactics*, a more unique product, SPI will no longer automatically publish each issue in a one-inch box format. Now the value of each issue of *S&T* will be enhanced by the fact that you are receiving an exclusive game that will not see print in any other medium. (Note: The exceptions to this general rule will include issue games that are part of a series — e.g., *Victory in the West*, *Central Front*, or *Great Battles of the Civil War* — which will be re-published much later in the same package as another game in the series.)

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In the March issue of

## Gamer's Guide

there were reviews of Nova Game Design's *The Hammer of Thor*, SPI's *Fifth Corps*, and *TimeTripper*, GDW's *The Battle of Lobositz*, TSR's *Boothill*, and Avalon Hill's *Magic Realm*. There was also "Spotlight", an inside view of game publishing companies. This issue looked in on Nova Game Designs, Inc.

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## Feedback Questions

S&T nr. 85, published Mar/Apr 1981

**How to Use the Feedback Response Card:** After you have finished reading this issue of *S&T*, please read the Feedback questions below and give us your answers by writing the answer numbers on the card in the response boxes which correspond to each question number. See centerfold for card.

**What the Numbers Mean:** When answering questions, 0 always means *no opinion* or *not applicable*. When the question is a yes or no question, 1 means *yes* and 2 means *no*. When the question is a rating question, 1 is the *worst* rating, 9 is the *best* rating, 5 is an *average* rating, and all numbers in between express various shades of approval or disapproval.

### 1-3. No question

The following questions ask you to rate the articles in this issue on a scale of 1 (poor) through 9 (excellent). 0 = no opinion.

4. Fighting Sail (game)
5. Fighting Sail (article)
6. Singapore
7. Outgoing Mail
8. For Your Information
9. Briefings 1
10. Briefings 2
11. Briefings 3
12. Games Rating Chart
13. No question
14. This issue overall
15. Was this issue better than the last one?
16. Assume that you do not subscribe to *S&T*. Would the quality of this issue alone motivate you to subscribe?
17. For how many issues have you had a continuous subscription to *S&T*? 0 = I do not subscribe; 1 = This is my first issue; 2 = This is my second or third issue; 3 = This is my fourth or fifth issue; 4 = This is my sixth issue; 5 = This is my seventh issue; 6 = This is my eighth through twelfth issue; 7 = This is my thirteenth through eighteenth issue; 8 = This is my nineteenth or subsequent issue; 9 = I am a *Lifetime Subscriber* to *S&T* (regardless of the number of issues received).
18. Did you send in the Feedback card for your last issue of *S&T*?
19. Your age: 1 = 13 years old or younger; 2 = 14-17; 3 = 18-21; 4 = 22-27; 5 = 28-35; 6 = 36 or older.
20. Your sex: 1 = male; 2 = female.
21. Education: 1 = 11 years or fewer; 2 = 12 years; 3 = 13-15 years; 4 = 13-15 years and still in school; 5 = 16 years; 6 = 17 years or more.
22. How long have you been playing conflict simulation games? 0 = less than a year; 1 = 1 year; 2 = 2 years...8 = 8 years; 9 = 9 or more years.
23. What is the average number of hours you spend playing simulation games each month? 0 = none; 1 = 1 hour or less; 2 = 2-5 hours; 3 = 6-9 hours; 4 = 10-15; 5 = 16-20; 6 = 21-25; 7 = 26-30; 8 = 31-40; 9 = 40 or more hours.
24. How many simulation games (of all publishers) do you possess? 1 = 1-10; 2 = 11-20; 3 = 21-30; 4 = 31-40; 5 = 41-50; 6 = 51-60; 7 = 61-70; 8 = 71-80; 9 = 81 or more.
25. What level of complexity do you prefer in games? Rate your preference on a 1-9 scale, with higher numbers indicating increased complexity. Use the following games as guidelines. 4 = *Chickamauga*; 7 = *Terrible Swift Sword*; 9 = *Air War*.
26. Pick the *one* area about which you would most like to see games and articles done. 1 = Ancient and Dark Ages (3000 BC to 1000 AD); 2 = Middle Ages and Renaissance (1000 AD to 1790); 3 = Napoleonic (1790 to 1830); 4 = American Civil War (1830 to 1900); 5 = World War One (1900 to 1930); 6 = World War Two (1930 to 1945);

7 = Modern (1945 to present and near future hypothetical); 8 = Science fiction; 9 = Fantasy.

27. Overall, which of the following features in the past few issues of *S&T* are most in need of change to make them better (through alterations in quality, quantity, format, etc.)? 0 = don't change anything; 1 = the game; 2 = the lead article, on the same subject as the game; 3 = the second major article; 4 = Outgoing Mail; 5 = Briefings; 6 = For Your Information; 7 = Games Rating Chart; 8 = Feedback; 9 = some other aspect of the magazine.

Question 28 refers only to non-*S&T* SPI games published in the last 12 months that you have played.

28. Did you have any problems with these games' rules? 0 = I did not play any non-*S&T* SPI game in the last 12 months; 1 = no problems with games played; 2 = a few problems, but not enough to prevent my playing the game, and I was able to handle them myself; 3 = a few problems, wrote to SPI for clarification and received a reply within a month; 4 = a few problems, wrote to SPI for a clarification and received a reply over a month later; 5 = a few problems, wrote to SPI for a clarification but never received a reply; 6 = had serious problems with the rules that prevented play, wrote to SPI for clarification and received reply within a month; 7 = had serious problems with the rules that prevented play, wrote to SPI for clarification and received reply more than a month later; 8 = had serious problems with the rules that prevented play, wrote to SPI for clarification but never received a reply; 9 = had problems with the rules and called SPI.

29. If a month has passed since you last ordered something from SPI, please answer the following questions about the service. 1 = I ordered a game(s) and received my order complete within three weeks of sending it in; 2 = I ordered a game and received my order complete within three weeks of sending it in, but with a game part(s) missing from one of the games; 3 = I ordered a game and received my order within three weeks, but one of the games was the wrong game; 4 = I did not receive my order within three weeks, but *did* receive an out of stock notice; 5 = I ordered a pre-publication sale game and did not expect to see it for a while; 6 = over three weeks have passed and I still have received no game or notification; 7 = my last order was for a subscription; 8 = my last order was for a non-subscription, non-game item and was handled all right; 9 = my last order was for a non-subscription, non-game item and I consider service to have been unjustifiably slow or otherwise unsatisfactory.

30. Please indicate the primary reason for not ordering through SPI's mail order service for items other than subscriptions. 0 = I do use SPI's mail order service regularly; 1 = do not want SPI products other than *S&T*; 2 = never buy anything by mail order from any company; 3 = stopped using SPI's mail order service because of long delays in receiving products (game not being sent out according to published dates); 4 = have all the games I can handle; 5 = products too expensive; 6 = prefer to buy in store; 7 = have not seen anything worth purchasing, but may still buy; 8 = product damage due to shipment (on part orders) has discouraged me from ordering by mail; 9 = other.

We would like to find out what problems various publishers (including ourselves) are having with getting all the right parts in a game. If you have bought a game from one (or more) of the following publishers within the last 12 months, please answer the question with the appropriate response. Consider only the last game you bought. 0 = have not bought a game from this publisher in the last 12 months; 1 = bought a game retail, no problem; 2 = bought a game direct mail; no problem; 3 = bought a game direct mail and it had a defective or missing component; 4 = bought a game retail and it had a defective or missing component; 5 = bought a game direct mail and received the wrong game.

31. Avalon Hill

32. SPI

33. GDW

34. How did you purchase this copy of *S&T*? 1 = by subscription; 2 = by mail as a single copy; 3 = in a store; 4 = it was passed along to me by a friend; 5 = other means (please describe).

35. On a scale of 1 through 9, rate how important high solitary playability in *S&T* games is to you when you consider re-subscribing to the magazine.

Please rate the following games on a 1 to 9 scale with 1 indicating a particularly strong dislike for a game and 9 an especially favorable opinion. Please rate only those games

which you have played (against an opponent or solitaire) at least once in the last year. If you have not played the game in the last year, please do not rate it (respond 0 in the space). All games listed are SPI published, unless otherwise specified.

36. Operation Grenade
37. Citadel of Blood
38. Voyage of the Pandora
39. Dallas
40. Dallas (Yaq)
41. Raid on Iran (SJG)
42. One-Page Bulge (SJG)
43. Kung Fu 2100 (SJG)
44. Dien Bien Phu (FBI)
45. Nuclear War (FBI)
46. Nuclear Destruction (PBM-FBI)
47. Tunnels & Trolls (FBI)
48. The Battle of Prague (GDW)
49. Lords & Wizards (FGU)
50. Colony Delta (FGU)
51. Middle Sea (FGU)
52. The Dragon Lords (FGU)
53. Mercenary (FGU)
54. War of the Ring (FGU)
55. Conquest of North America (FGU)
56. War of the Sky Cities (FGU)
57. Madame Guillotine (FGU)
58. Gangster (FGU)
59. Villains & Vigilantes (FGU)
60. Space Opera (FGU)
61. Skull & Crossbones (FGU)
62. Flash Gordon (FGU)
63. Odysseus (FGU)
64. Land of the Rising Sun (FGU)
65. Chivalry & Sorcery (FGU)
66. UFO (AH)
67. Source of the Nile (AH)
68. Feudal (AH)
69. Machiavelli (AH)
70. Circus Maximus (AH)
71. Fortress Europa (AH)
72. Napoleon (AH)
73. The Longest Day (AH)
74. Submarine (AH)
75. War at Sea (AH)

Rate the following game proposals on a scale of 1 to 9 with 1 indicating very little inclination to buy the game if published up through 9 indicating a definite intention to purchase it.

76. **Alexander's Empire.** When Alexander the Great died in 323 BC, he left behind the greatest empire the world had yet known, an ambitious group of generals, and — as heirs — a moronic half-brother and a posthumous son. The power struggle that followed lasted 42 years and ended when the winner, Seleukos, was assassinated on his way to Macedon to claim Alexander's throne. *Alexander's Empire* is a multi-player simulation of this period using *The Conquerors* game system with a simplified form of tactical combat and rules dealing with the political infighting of the period, including assassination, shifting loyalties, armies selling out their leaders (for cash down), the Regency and the Royal treasury (money being the source of power), the role of the Macedonian army in choosing the king (it was by acclamation but was by no means a rubber stamp), control of the heirs (sometimes a liability rather than an asset), Alexander's body and tent (valuable propaganda tools), and Greek public opinion. Three scenarios are planned. 323 BC: Players represent leading generals as they strive to preserve the Empire (like Antipatros), carve out their own private kingdom (Ptolemy), or seize the Empire for themselves (Antigonos). Victory conditions will vary to match the role the player chooses. In addition, one player can choose to represent the Greek City States who used the confusion to attempt to break free and almost succeeded. 309 BC: With only five contenders left, each holding his own kingdom, a new round of fighting for supremacy begins. 281 BC: Lysimachos and Seleukos face off in the last round of fighting to determine who will rule Alexander's Empire. To sell for \$15.



**77. Memphis to Vicksburg.** A simulation of General U.S. Grant's amazing campaign down the Mississippi. A new, operational Civil War game system highlighting maneuver, limited intelligence, and river movement would be used on a 22" x 34" game-map portraying the entire Mississippi River area from Memphis to the fortress of Vicksburg. The Union player would attempt to match the success of Grant's drive to cut the Confederacy in two, while the Confederate player tries to avoid the strategic errors of the historical commanders and outfox the audacious Union plans. Special rules would cover "shooting the gap" past Confederate artillery, supply and abandonment of same, and a quasi-tactical battle resolution system to recreate some of the crucial engagements (such as Champion's Hill) during the campaign. Would include one map, 200 counters, eight to 12 pages of rules. A possible S&T game.

**78. Lawrence of Arabia.** A strategic/operational level simulation of the Near Eastern campaigns of World War I. During the period of trench warfare in Europe, the Near East was an area where nations could still gain glory by capturing such glittering cities as Jerusalem, Baghdad, and Aleppo. For the Allies it started as a battle of survival to protect the Suez Canal with a hodge-podge of colonial troops, regular regiments, and finally, Arab guerrillas, and ended as a glorious campaign for Jerusalem and beyond. For the Turks, it was a chance to strangle England by seizing the Suez, but became a grim battle of survival for "The Sick Old Man of Europe." The game system would be on two levels with strategic movement and operational battles. Included would be supply and leadership rules, effects of Mesopotamian flooding, Lawrence of Arabia counter, river movement, armored cars, camel corps and airplanes. The 22" x 34" game-map would cover the Near East from Sinai to the southern Turkish border and from the Mediterranean coast to the Persian Gulf. Would include 200 counters and would sell for \$12.

**79. The Kaiser's Battle II.** The simulation of the *Kaiser's Battle* that was included in S&T 83 was a representation of the last-ditch German offensive of the First World War in Picardy, France. Due to the magazine's space constraints, this game was able to portray only the German 18th Army's set-piece offensive in March 1918. The 18th Army's attack was only a portion of the whole of *Operation Michael*. In fact, two other entire German armies (2nd and 17th) participated in the offensive on the same day, covering a frontage that overlapped General Gough's 5th British Army to include General Sir Julian Byng's 3rd Army in the north. *The Kaiser's Battle II* would simply be an extension of the original game, employing the exact game-system and Game-Turn and map scale. It would include a single 22" x 34" map, which could be joined to the original game's map on its northern edge. Thus, either game could be played separately or they can be joined together to simulate the entire *Michael* offensive. To sell for \$10.

**80. The Narrow Seas.** An operational/tactical simulation of naval action in the Mediterranean during World War II, in particular the attempts to run convoys through to Malta in 1942. These actions decided the fate of the North African campaign and were complex operations involving all of the weapons of naval warfare: land-based aircraft, carrier-based aircraft, surface combatants, submarines, PT boats, minefields, etc. The main action will take place on a 22" x 17" game map covering most of the Mediterranean, but air attacks and surface engagements will be fought out on a separate tactical display. The German player will be in the position of Field Marshal Kesselring, trying to coordinate his aircraft, submarines, E-boats, and reluctant Italian surface warships to find and destroy the British convoy. A properly coordinated attack can be devastating, a poorly coordinated one can mean heavy losses for no result. But first he must find the convoy. Will it come from the west this time, or the east, or both at once? The British player will do his best to fool his opponent while deploying his forces to protect the fragile merchant ships without exposing his few, precious warships to undue risk in the narrow seas. All the big convoy actions of 1942 will be covered, together with the battles of Matapan and Calabria. In addition, a campaign game will link the convoy actions, with losses and supplies delivered in one action affecting the situation in the next. To sell for \$12.

**81. Carentan.** One of the most popular S&T games ever published, *Cobra*, covers the breakout from the Normandy hedgerows in July and August of 1944. *Carentan* would be an expansion game covering the entire Normandy operation, from the initial D-Day landings, to the taking of the Carentan Peninsula, to the Falaise Pocket (the

end of the *Cobra* game). Using the same game system with additional rules covering amphibious operations, airborne operations, naval bombardments, and fortified positions, *Carentan* would include a 22" x 17" map to be attached to the north edge of the *Cobra* game-map, and 100 additional counters (including many battalion-size units for the specialized nature of beachhead combat). *Carentan/Cobra* would result in a "mini-monster" game blending strategic planning and operational finesse. Ownership of *Cobra* would be necessary to play *Carentan*. A possible "bonus" game in S&T, to sell separately for \$6.

**82. Crusader: The Relief of Tobruk.** A totally new design of the battle depicted in the SPI folio game of the same name. The emphasis would be on rapid movement and non-linear tactics (elements missing from the folio game). A 22" x 34" game-map would be used to reduce unit density and to simulate the fluid actions of the Western Desert. Emphasis would be on movement and combined arms combat. A partially hidden movement system would simulate both side's intelligence problems, an essential element in this very confused battle. German units would be composed of a number of steps, while most British and Italian units would have just one step. Supply rules would be simple but extremely important. Included would be rules for British armor replacement, combined arms combat bonuses, divisional integrity, separate hard and soft combat strengths, and variable victory conditions depending on the objectives the players choose. The game would include 200 battalion and regiment sized units and a 22" x 34" game-map. A possible S&T game.

**83. 1990.** This game will simulate the battlefield of tomorrow, when all the major weapons systems currently under development have actually been deployed. Weapons systems such as the XM1, XM2, and XM3 tanks, the American MRL and DIVAD vehicles, the Assault Breaker, and the AH64 would be included, along with their Soviet counterparts. The game would avoid a science fiction approach to future combat; rather, it would provide a projection of the battlefield of the immediate future, for comparison with the battlefield of the present, and thus allow players to gauge the impact of current development efforts on armored warfare. Software advances in NBC protection and electronic warfare would be incorporated, along with the new organizational concepts proposed under the Army's Div 86 program. Utilizing one map and 400 counters, the game would be based on the *October War* system. Design emphasis would fall on speed of play rather than complicated and in-depth simulation. To sell for \$15.

**Second Edition Games.** Over the years SPI has produced a large number of excellent simulations which have been pushed into the background by newer, flashier games. A "face lift" involving research revision, state-of-the-art game mechanics, improved rules composition, and more attractive and utilitarian graphics could turn these classics into the latest word on their respective subjects. Each game would remain close to the original in design intent, complexity level, and component value (i.e., one or two maps and 100 to 400 counters). Each would cost from \$12 to \$18. We are considering the following titles (84 through 89) for this treatment. Rate each one separately.

**84. Frigate.** Tactical Naval Warfare, 1600's to early 1800's.

**85. Dreadnought.** Surface Combat in the Battleship Era, 1906-45.

**86. USN.** The War in the Pacific, 1941-1945.

**87. Global War.** The War against Germany and Japan, 1939-45.

**88. World War III.** Global Warfare in the 80's.

**89. Invasion America.** Death-throes of the Superpower, 1990.

**90. S&T Deluxe Subscription Service.** Available by subscription only (not in stores), this service would provide each issue of S&T in a 2-inch standard cardboard box labeled with the name of the game and the issue number (not illustrated), along with a plastic-insert tray and a die. The issues would be mailed out UPS (or parcel post to PO boxes), \$42/year.

**The Once and Future King.** King Arthur's knights had to prove the worthiness of their calling. In addition to the jousts that measured a knight's strength, there were also quests — the rescue of a fair lady from a foul knight, for instance — and the most famous quest of all, the search

for the Holy Grail. In addition, there were also great contests of might between kingdoms. The game could be done in one of three possible ways (please rate each one separately).

**91.** A full-size game that would cover everything from the rise of Uther Pendragon to the final conflict between Arthur and his bastard nephew, Modred. Would contain 56 character cards, 400 playing pieces, and a 22" x 34" map of England. To sell for \$18.

**92.** A character game in which players would become knights and go out on quests. Would contain 56 cards, 100 counters, and a 22" x 34" map of the area around Camelot. To sell for \$15.

**93.** An army game which would center on the ebb and flow of kingdoms in the Arthurian world. No cards, 400 counters, and 22" x 34" map of England. To sell for \$12.

**94.** Indicate what percentage of your average monthly game playing hours are spent on fantasy role-playing games. 0 = none or almost none; 1 = 10%; 2 = 20%; 3 = 30%; ... 9 = 90% or more.

**95-96.** No question

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## OUTGOING MAIL

continues to expand this wide-open market with conversions — *Acquire, Stocks and Bonds*, and *Major League Baseball* — and new additions — *Lords of Karma* (fantasy) and *Conflict 2500* (science fiction).

Game Designer's Workshop made some modest announcements at the show: *The Fall of France* (a continuation of the Europa series); *Triplanetary* (revised and reissued with an attractive new cover); *Suez '73* (Arab-Israeli War) and *Traders & Gunboats* (a Traveller supplement), plus an anthology of articles in *The Best of the Journal*. GDW will put their fantasy role-playing project on the shelf. An attractive marketing touch was provided by GDW at the show in the form of a free brochure entitled *Understanding Traveller*.

Metagaming has released *Dimension Demons* and *Lords of the Underearth* in the micro line, *Security Station* (a micro-quest for the *Fantasy Trip*) and *Fury of the Norsemen* (added to the microhistory line). Metagaming has also announced a coming line of *Metagames*, a larger-sized product, approximately double the size of the micros. Most of the promised titles in the new line are historical: *Hitler's War* and *Trojan War*. Missing from the Metagaming catalog were *Ogre* and *GEV*, since legal problems are still on-going with the game's designer Steve Jackson. *Interplay*, a digest-sized bi-monthly magazine is in the works at Metagaming. Another shot at Steve Jackson, or was the *Space Gamer* worth more than originally calculated?

Yaquinto has an impressive array of upcoming titles, all in their trademark album format (\$8-10). Looks like they have found their niche. Publication plans include three waves of four titles between now and April — an ambitious task! The first group consists of *Attack of the Mutants* (science-fiction à la 1950); *Barbarians* (Fall of Rome and Mongol Invasion all in one); *Asteroid Pirates* (ship to ship combat); and *Demon's Run* (a science fiction race). The second wave shows signs of being a Dallas follow-up: a repackaging of *Battle*; the *Roaring 20's* (gangster schtick); *Neck and Neck* (horse racing) and *Market Madness* (stock market). The third wave expands the line with *Apache*, a game of the Old West with an effective cover showing Burt Lancaster from the movie of the same name and includes a scene from a John Wayne movie (might be "She Wore a Yellow Ribbon"?). Obviously MacGowan likes old movies! *Fall of South Vietnam*, a previously unsuccessful subject whose time might now be right; *Superiority* (WWIII) and *Adventurer*, your run of the outer space cantina scene complete with weird aliens with light sabers.

Task Force Games announced the repackaging and renaming of *Prochorovka* as *Armor at Kursk* in a \$6 boxed version. *Operation Pegasus*, the 1st Cav. in Vietnam, and *SwordQuest* will be boxed. *Federation Space*, a strategic link game for the highly successful *Starfleet Battles*, was shown off. Other new products coming will be *Power Play*, a card game dealing with third world strife; *Psychic*, an ESP card game (shades of "Scanners"); *Ultra Warrior*, the battle of the space heroes; *Survival/The Barbarian*, a double game (one science fiction and one fantasy); and lastly *Battlewagon*, a game of dreadnoughts.

Fantasy Games Unlimited made its first appearance at HIA to introduce its line to dealers and distributors. New offerings include *Diadem*, a boardgame of SF ground and space combat with some 1000 counters on a 36" x 34" map, and *Gateworld*, a multi-player SF game of alien planet control. Coming soon will be a role-playing game of the American West, *Oregon Trail*; *Witch World*, combining role-playing, miniatures and board-gaming; *Saracen and Crusader*, a supplemental

piece for *Chivalry and Sorcery*; and also a comprehensive book on role-playing including hints for successful play.

Eon Products, the folks who brought you *Cosmic Encounters* and *Darkover*, released *Quirks*, an unusual game of (are you ready) evolution. The object of the game is to survive and thrive while your opponents is forced into extinction.

The Chaosium came on strong with some beautiful art work for their up-coming *Elric* tie-ins: *Stormbringer, Elric*, and *White Wolf*. Ready for this spring is *Thieve's World* followed by the *Call of Cthulu*, a role-playing game based on the H.P. Lovecraft story. Down the road is *Worlds of Wonder*, rules for role-playing fantasy, science-fiction and super-heroes, and *Vive L'Empereur*, a set of grand tactical rules for fighting Napoleonic battles.

More *RuneQuest* supplements are in the works: *Griffin Mountain* and *Outland Cults*. Greg Stafford and Lynn Willis collaborated on an excellent 16-page introductory *Guide for Basic Role-Playing* for The Chaosium.

Steve Jackson, the man who brought you *Raid on Iran*, announced *Car Wars*, a design-your-own-freeway-combat-vehicle-and-hit-the-road-of-the-future (or at least the LA freeways). A role-playing game on Dracula is also a promised future release. All will be in small format and priced at \$3.00.

A curious little game was circulating around HIA from somewhere in Cedar Park, Texas. The title was *A Fistful of Turkeys* (\$1.95) — the story of Billy Jackal and the battle in the turkey hutches across Texas. There is the threat of more to come: *For a Few Turkeys More*, *The Good The Bad and The Turkey*, and *Kamikaze Turkey*.

SPI revealed its major summer release, *Spies*, a card and board game of espionage in the 30's. The designers are John Prados and Lenny Glynn and David Ritchie is the developer. SPI also announced its new pricing structure, with one-inch boxed games moving from \$6.00 to \$8.00 and with many of the larger games taking a price hike: *Commando* (\$25), *The Next War* (\$50), *NATO Division Commander* (\$40), to mention a few.

Has the hobby finally been discovered by major companies? Are we going to witness take-overs and buy-outs? Well, one big publisher thinks the hobby is worth getting into. Reston Publishing, a subsidiary of Prentice-Hall, has acquired *High Fantasy*, a role-playing game by Jeff Dillow of Twinn-K. Expansions to the product are planned.

The war between the two summer East Coast Cons has ended. Both GenCon East, run by the Widner College Convention crew, and Atlanticon, run by Interest Group Baltimore, were scheduled to run the weekend of July 24-26. Atlanticon has withdrawn and cancelled and was rewarded by being made the site for Origins 1982. Speaking of conventions, make your reservations early for the Pacificon Origins this July 4th weekend in San Mateo, California. It promises to be a busy show.

Instant Hot at Origins '80 was *Ace of Aces*, released by Nova Games (formerly Gameshop). They hope to have ready for Origins '81 the next edition called the *Powerhouse Series* including a Spad XIII and Fokker D7. For Christmas release a WWII version should appear with a P-51 versus an FW 190. After that could possibly be frigate vs. frigate and maybe a fantasy game.

Ral Partha, a miniatures company from Cincinnati, is importing England's Games Workshop line of boxed games: *Dr. Who*, *Valley of the Four Winds*, *Apocalypse*, and *Warlock*.

Heritage USA of Dallas, Texas, is releasing its minigame line called *Dwarfstar* for Origins '81. The \$4.95 games will have 144 full color counters and a full color 12" x 14" map. The titles for the line will include *Star Viking*, *Outpost Gamma*, *Demonlord*, and *Barbarian Prince*. Prior to the release of these are two miniature kits (adventure gaming kits) consisting of paints, figures and a game: *Famous Monsters* and *Superheroes and Super Villains*. Also in the stall are four smaller miniature kits with fantasy figures in styrene plastic (the hard type).

Howie Barasch

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# GAMES RATING CHART

Title	Pub.	Pub. Date	Price (\$)	Accept. Rating	% Played	Complex Rating	Playing Time	Solitaire Playability
<b>ANCIENT &amp; DARK AGES</b>								
1. The Conquerors	SPI	7/77	20	6.5	14	6.5	7	5.0
2. Caesar Alesia	AH	7/76	13	6.4	22	5.4	4	4.4
3. Acre	SPI	1/79	9	6.4	9	6.0	5	5.1
4. Spartan	SPI	2/75	8	6.2	18	6.0	3	6.0
5. Viking	SPI	2/75	8	6.2	16	6.0	3	6.0
6. Legion	SPI	2/75	8	6.2	16	6.0	3	6.0
7. Ancient Conquests	EG	na	11	6.2	6	3.0	5	2.0
8. Chariot	SPI	2/75	9	6.1	15	6.0	3	6.0
9. Yeoman	SPI	2/75	9	6.1	14	6.0	3	6.0
10. Raphia 217 B.C.	GDW	7/77	6	6.1	8	4.5	2	5.0
11. Tyre	SPI	1/79	9	6.0	11	6.0	5	5.5
12. Strategy I	SPI	6/71	15	5.9	16	7.9	7	4.5
13. Sticks & Stones	MG	6/78	3	5.9	9	5.0	3	6.5
14. Siege	F&F	na	6	5.9	5	5.0	2	6.5
15. The Crusades	SPI	9/78	10	5.7	47	6.0	4	6.0
16. Alexander the Great	AH	1/74	13	5.7	6	5.0	3	5.0
17. Troy	TC	7/77	10	5.5	4	5.5	2	0.0
18. Punic Wars	SPI	12/76	5	5.4	6	5.5	3	6.0
19. Peloponnesian War	SC	na	11	5.3	3	6.0	6	5.0

## MIDDLE AGES & RENAISSANCE

1. Empires	SPI	4/80	18	7.2	11	5.8	6	6.0
2. Kingmaker	AH	6/74	13	6.9	33	5.2	5	2.8
3. Fredrick the Great	SPI	4/75	12	6.6	22	5.7	3	5.0
4. Samurai	AH	7/80	13	6.5	7	5.4		
5. A Mighty Fortress	SPI	7/77	12	6.4	14	5.6	5	2.9
6. Nordlingen	SPI	4/76	4	6.4	13	4.4	3	6.7
7. Battle of Prague	GDW	6/80	6	6.4	6	5.2	2	0.7
8. Musket & Pike	SPI	3/73	12	6.3	14	5.2	3	5.9
9. Lutzen	SPI	4/76	4	6.3	11	4.7	3	6.6
10. Art of Siege	SPI	1/79	30	6.3	10	6.3	6	5.5
11. Breitenfeld	SPI	3/76	5	6.2	34	3.9	3	6.6
12. Frigate	SPI	7/74	8	6.2	21	6.1	3	4.5
13. 30 Years War Quad	SPI	4/76	12	6.2	16	3.9	3	6.0
14. Rocroi	SPI	4/76	5	6.2	16	5.0	2	6.5
15. Tamlulaine	SPI	11/79	5	6.2	13	5.5	4	5.0
16. En Garde	GDW	6/75	4	6.2	11	5.0	9	2.0
17. Lille	SPI	1/79	9	6.2	10	6.4	7	5.8
18. Torgau	GDW	9/74	9	6.2	8	7.1	6	4.0
19. Battle of Lobositz	GDW	7/78	6	6.2	7	5.2	2	0.7
20. 1776	AH	4/74	15	6.1	31	5.8	4	4.9
21. Great Med. Battles-Q	SPI	11/79	20	6.1	14	5.5	4	5.0
22. Black Prince	SPI	11/79	5	6.1	13	5.5	4	5.0
23. Conquistador	SPI	8/76	9	6.0	44	6.8	6	7.1
24. Robert at Bann.	SPI	11/79	5	6.0	13	5.5	3	5.0
25. Freiburg	SPI	4/76	5	6.0	13	6.0	4	5.5
26. King Arthur	SPI	11/79	5	5.8	12	5.5	4	5.0
27. Constantinople	SPI	1/78	9	5.7	59	5.0	5	4.5
28. Agincourt	SPI	8/78	14	5.5	18	5.8	4	6.9
29. Battle of Agincourt	GDW	10/78	6	5.5	7	4.5	2	0.0
30. Imperialism	FBI	na	10	5.5	3	4.3	8	2.0
31. Armada	SPI	1/79	9	5.1	50	4.5	5	4.0

## NAPOLEON

1. Napoleon's Last Battle	SPI	10/76	16	7.2	29	5.6	6	7.0
2. Wellington's Victory	SPI	10/76	30	7.2	20	7.4	8	5.0
3. Grenadier	SPI	12/73	9	1.5	15	5.8	3	5.8
4. Wooden Ships/Iron Men	AH	10/75	13	7.1	37	6.7	1	4.4
5. Ligny	SPI	10/76	4	7.0	25	5.2	2	6.9
6. La Belle Alliance	SPI	10/76	4	7.0	24	5.2	2	6.8
7. Nap. At War Quad	SPI	8/75	16	6.9	29	4.8	3	7.2
8. Wagram	SPI	8/75	4	6.9	28	4.7	3	7.2
9. Quatre Bras	SPI	10/76	4	6.7	30	5.1	1	7.0
10. Marengo	SPI	8/75	4	6.7	26	4.6	3	7.2
11. Borodino	SPI	4/72	12	6.7	22	4.1	2	6.9
12. Ney vs. Wellington	SPI	5/79	72	6.6	69	6.6	5	5.8
13. Battle of Nations	SPI	8/75	4	6.6	26	4.8	3	6.8
14. Wavre	SPI	10/76	4	6.6	22	5.2	3	6.9
15. War and Peace	AH	2/80	15	6.5	60	6.0	2	8.0
16. Eylau	GDW	6/80	10	6.4	7	5.9	3	0.0
17. Eylau	SPI	8/79	12	6.3	53	6.0	3	6.8
18. Jena-Auerstadt	SPI	8/75	4	6.3	25	4.5	3	6.6
19. La Grande Armee	SPI	10/72	9	6.2	17	5.3	3	5.5
20. Dresden	SPI	8/79	12	6.1	48	6.0	3	7.0
21. NAW-Expansion	SPI	3/74	9	6.1	19	3.5	2	6.3
22. Nap. at Waterloo	SPI	2/71	9	5.8	64	1.6	2	6.3
23. Waterloo	AH	4/61	13	5.8	21	3.3	3	5.7
24. Le Grande Empire	SC	na	10	4.5	3	2.0	8	2.0
25. Grenadier	SPI	12/73	9	1.5	15	5.8	3	5.8

## AMERICAN CIVIL WAR

1. Ironclads	YAO	6/77	17	7.4	11	7.0	2	4.0
2. Terrible Swift Sword	SPI	7/76	24	7.3	35	7.3	2	5.5

Title	Pub.	Pub. Date	Price (\$)	Accept. Rating	% Played	Complex Rating	Playing Time	Solitaire Playability
3. Bloody April	SPI	9/79	27	7.0	22	7.6	4	5.5
4. Chickamauga	SPI	4/75	4	6.8	34	4.6	6	4.5
5. Pea Ridge	SPI	4/80	10	6.8	25	6.8	4	4.5
6. Drive on Washington	SPI	4/80	10	6.8	18	6.7	4	4.0
7. Blue & Grey	SPI	4/75	16	6.7	31	4.7	2	6.6
8. Blue & Grey-2	SPI	12/75	16	6.7	26	4.6	2	6.6
9. War Bet. the States	SPI	5/77	26	6.6	23	7.0	2	6.0
10. Stonewall	SPI	4/78	12	6.5	48	6.7	4	5.5
11. Wilson's Creek	SPI	5/80	8	6.5	44	7.0	6	5.5
12. Antietam	SPI	4/75	4	6.5	28	4.6	2	6.0
13. Shiloh	SPI	4/75	4	6.4	28	4.6	2	6.6
14. Chattanooga	SPI	12/75	4	6.4	23	4.6	5	6.6
15. Creekman War Quad	SPI	4/78	20	6.4	14	5.9	3	6.0
16. Inkerman	SPI	4/78	4	6.3	12	6.2	3	6.5
17. Crimea	GDW	5/75	10	6.3	6	6.7	7	4.8
18. Fredricksburg	SPI	12/75	5	6.2	25	3.9	2	6.6
19. Hooker & Lee	SPI	12/75	5	6.2	22	3.9	2	6.6
20. Bloody Ridge	SPI	10/75	5	6.2	20	5.0	2	6.5
21. Tchernya River	SPI	4/78	4	6.2	16	6.3	2	6.0
22. Sevastopol	SPI	1/79	9	6.2	9	6.4	5	5.5
23. Source of the Nile	AH	7/78	12	6.2	5	5.0	6	0.0
24. Vera Cruz	SPI	7/77	9	6.1	52	6.5	4	4.0
25. Battle of the Wilder.	SPI	12/75	5	6.1	23	3.9	3	6.6
26. Gufford Courthouse	GDW	7/78	6	6.1	7	5.0	2	0.0
27. Balaklava	SPI	4/78	4	6.0	18	5.9	2	6.0
28. Alma	SPI	4/78	4	6.0	17	5.9	2	6.0
29. Cemetery Hill	SPI	4/75	5	5.9	23	3.9	2	6.6
30. Battle of the Alma	GDW	10/78	6	5.9	7	6.0	2	0.0
31. Fury in the West	AH	7/77	11	5.8	7	5.6	5	8.0
32. American Civil War	SPI	3/74	8	5.7	25	6.2	3	5.8
33. Gettysburg (77 ed.)	AH	7/77	15	5.6	14	6.0	5	0.0
34. Lee Moves North	SPI	4/73	9	5.4	15	5.2	4	4.3
35. Chickamauga	FBI	na	5	5.0	1	5.0	4	5.0

## WORLD WAR I

1. To the Green Fields	SPI	5/78	12	6.9	20	7.0	8	7.0
2. Great War in the East	SPI	11/78	20	6.9	14	5.9	5	4.4
3. Red Star/White Eagle	GDW	6/79	12	6.8	7	6.3	3	4.0
4. Serbia/Galicia	SPI	11/78	5	6.6	13	5.8	4	5.5
5. Caporetto	SPI	11/78	5	6.6	13	5.6	4	5.5
6. Diplomacy	AH	6/61	15	6.5	34	4.4	6	2.2
7. Von Hindenberg	SPI	11/78	5	6.5	14	5.8	4	4.4
8. Soldiers	SPI	8/72	9	6.2	15	5.5	3	6.0
9. Brusilov	SPI	11/78	4	6.2	11	5.8	3	5.5
10. Dreadnought	SPI	7/75	12	6.1	21	5.5	3	4.6
11. Tannenberg	SPI	7/78	10	6.0	56	5.8	4	4.0
12. World War One	SPI	8/75	5	6.0	35	3.0	3	4.0
13. Richthofen's War	AH	3/73	10	6.0	29	4.8	1	5.2
14. Russo-Japanese War	GDW	4/76	10	6.0	8	6.9	6	5.0
15. Red Sun Rising	SPI	1/78	12	5.9	13	6.5	5	5.0
16. Schutztruppe	FBI	na	7	5.9	4	5.8	5	4.0
17. Fight in the Skies	TSR	6/76	10	5.7	4	4.0	7	0.0
18. Mod 1: 1st World War	SPI	5/77	18	5.5	11	6.6	4	3.0
19. Siege of Port Arthur	SF	na	6	5.5	3	6.0	6	5.0

## WORLD WAR II

1. Crescendo of Doom	AH	6/80	15	7.6	17	6.8	2	5.0
2. Battle for Stalingrad	SPI	6/80	15	7.5	8	6.0	7	6.0
3. Squad Leader	AH	7/77	15	7.4	38	6.6	3	5.0
4. Cross of Iron	AH	7/78	13	7.4	27	7.8	2	5.0
5. War in Europe	SPI	11/77	50	7.4	15	7.4	9	5.0
6. Kursk	SPI	6/80	15	7.4	7	6.8	7	6.2
7. Panzergruppe Guderian	SPI	8/76	12	7.3	45	5.9	5	7.3
8. Highway to Reich-2	SPI	2/77	33	7.3	16	7.5	8	7.5
9. White Death	GDW	11/79	13	7.3	8	7.3	7	5.0
10. Airforce	AH	7/76	15	7.2	15	6.6	2	2.0
11. DNO/Unentschieden	GDW	10/73	29	7.2	11	7.2	15	4.3
12. Dauntless	AH	7/77	15	7.2	10	6.8	1	2.0
13. War in East-2nd ed.	SPI	11/76	30	7.1	21	6.9	8	4.5
14. Ardennes Quad	SPI	1/79	20	7.0	18	5.8	25	6.0
15. Wacht Am Rhein	SPI	1/77	30	7.0	16	7.0	2	6.5
16. War in the West	SPI	3/76	40	7.0	16	7.1	8	4.5
17. Atlantic Wall	SPI	6/78	33	7.0	15	7.0	3	6.5
18. St. Vith	SPI	1/79	5	7.0	13	5.6	4	6.0
19. Camp. for North Africa	SPI	6/79	44	7.0	7	8.5	50	5.5
20. Flattop	AH	7/77	15	6.9	17	6.9	9	1.0
21. Clervaux	SPI	1/79	5	6.9	14	5.5	4	6.0
22. War in the Pacific	SPI	5/78	50	6.9	14	8.1	9	0.0
23. Bismarck (79 ed.)	AH	6/79	15	6.9	12	6.5	5	4.0
24. Drive on Stalingrad	SPI	12/77	18	6.8	16	6.0	7	5.8
25. Typhoon	SPI	11/78	22	6.8	14	6.3	5	6.9
26. Sedan	SPI	1/79	5	6.8	12	5.5	4	6.0
27. Marita-Merkar	GDW	6/79	13	6.8	10	8.0	5	6.0
28. Leningrad	SPI	1/80	7	6.8	9	5.5	5	6.5
29. Case White	GDW	6/77	13	6.8	8	7.0	5	4.5



Title	Pub.	Pub. Date	Price (\$)	Accept. Rating	% Played	Complex Rating	Playing Time	Solitaire Playability
116. Tito	SPI	7/80	10	4.6	54	6.0	4	1.0
117. Tactics II	AH	6/58	8	4.4	15	2.4	2	5.5
118. Caen	EG	7/78	6	4.4	4	6.0	5	5.0
119. Viva!	FBI	na	5	4.4	2	5.0	4	5.0

## MODERN

1. The Next War	SPI	7/78	34	7.4	23	7.9	24	5.5
2. Air War 80	SPI	12/79	22	7.4	9	9.0	4	2.0
3. NATO Division Cmdr	SPI	6/80	27	7.3	8	7.1	3	3.0
4. Tactforce	GDW	6/80	12	7.0	4	7.1	3	2.5
5. Berlin '85	SPI	3/80	6	6.9	49	6.8	5	6.0
6. Bundeswehr	SPI	7/77	4	6.9	22	5.3	2	6.0
7. Firefight	SPI	8/76	20	6.9	21	6.5	3	5.5
8. Red Star/White Star	SPI	6/79	20	6.9	16	8.0	2	6.0
9. Fifth Corps	SPI	9/80	10	6.8	86	7.1	5	3.0
10. Mech War II	SPI	6/79	35	6.8	16	8.0	2	6.0
11. Barlev	GDW	5/74	13	6.8	10	6.7	6	5.0
12. Fulda Gap	SPI	6/77	12	6.7	19	7.0	5	6.5
13. Yugoslavia	SPI	7/77	4	6.6	18	5.4	3	6.0
14. Wurzburg	SPI	6/75	4	6.5	23	5.0	2	6.5
15. Jerusalem	SPI	7/77	4	6.5	17	5.2	2	6.0
16. Mod Quad II	SPI	7/77	16	6.5	17	5.3	2	6.0
17. Suez to Golan	SPI	6/79	20	6.5	14	8.0	2	6.0
18. Sinai	SPI	2/73	12	6.4	22	5.7	3	6.7
19. Mod Quad I	SPI	6/75	16	6.4	21	5.0	2	6.5
20. Chinese Farm	SPI	6/75	4	6.3	20	5.0	2	6.5
21. Citadel	GDW	4/77	13	6.3	7	7.0	6	4.0
22. Operation Pegasus	TFG	6/80	4	6.3	5	6.0	4	6.0
23. Sixth Fleet	SPI	1/75	8	6.2	40	6.3	4	6.0
24. October War	SPI	3/77	12	6.2	34	6.5	2	4.5
25. Invasion: America	SPI	12/75	18	6.2	21	5.5	6	4.5
26. Objective: Moscow	SPI	3/78	27	6.2	19	5.0	30	5.0
27. Mech War 77	SPI	4/75	12	6.1	22	6.6	5	4.2
28. Cityfight	SPI	11/79	23	6.1	17	7.0	3	2.5
29. Arab-Israeli Wars	AH	5/77	15	6.0	27	6.8	3	5.4
30. Mukden	SPI	6/75	5	6.0	21	5.0	2	6.5
31. Raid	SPI	9/77	9	5.9	58	6.5	2	3.0
32. DMZ	SPI	7/77	4	5.9	16	5.3	3	6.0
33. After the Holocaust	SPI	7/77	12	5.9	16	7.5	7	7.0
34. Yalu	GDW	7/77	12	5.8	5	5.7	5	6.0
35. Battle Plan (PBM)	FBI	5/80	8	5.8	2	4.9	na	0.0
36. NATO	SPI	7/73	8	5.7	4	6.0	4	6.0
37. World War III	SPI	1/75	8	5.7	29	7.4	6	5.0
38. China War	SPI	10/79	6	5.6	53	6.9	5	6.0
39. Ultimatum	YAQ	6/79	13	5.6	5	4.0	2	2.0
40. East is Red	SPI	1/74	9	5.5	36	5.2	3	6.5

Title	Pub.	Pub. Date	Price (\$)	Accept. Rating	% Played	Complex Rating	Playing Time	Solitaire Playability
41. Foxbat & Phantom	SPI	6/73	8	5.5	24	5.4	3	5.2
42. Minuteman	SPI	12/76	9	5.4	9	5.5	3	5.0
43. Nuclear Destruction	FBI	na	6	5.4	6	3.1	na	na
44. Oil War	SPI	10/75	5	5.3	75	5.0	3	6.0
45. South Africa	SPI	5/77	9	5.1	55	6.0	3	5.0
46. Revolt in the East	SPI	5/76	5	5.1	39	5.0	3	6.5
47. Canadian Civil War	SPI	10/77	9	5.1	6	5.5	3	3.5
48. Armour Supremacy	AH	na	7	4.2	3	2.9	1	5.0
49. Quebec Libre	SC	na	11	3.7	2	6.0	3	1.0

## SCIENCE FICTION

1. Traveler	GDW	7/77	12	7.2	16	6.9	5	5.5
2. Freedom in the Galaxy	SPI	6/79	20	7.1	12	7.0	7	5.5
3. GEV	MG	na	3	7.0	16	4.5	2	6.5
4. Imperium	GDW	7/77	10	7.0	14	5.6	5	2.5
5. Ogre	MG	5/77	3	6.8	27	3.9	1	6.5
6. Azhanti High Lightning	GDW	6/80	22	6.8	5	6.7	5	0.0
7. Battlefleet: Mars	SPI	4/77	15	6.4	18	6.6	5	3.0
8. Stargate	SPI	4/79	4	6.4	11	4.9	2	6.0
9. Stellar Conquest	MG	2/75	13	6.4	8	6.0	6	3.0
10. Starship Troopers	AH	7/76	15	6.2	17	5.0	2	3.5
11. Vector 3	SPI	4/79	4	6.2	11	5.8	2	3.0
12. Starforce	SPI	9/74	12	6.1	26	6.0	4	4.5
13. Wreck of Pandora	SPI	5/80	8	6.1	25	5.0	1	7.0
14. Warp War	MG	5/77	3	6.1	16	4.5	1	5.0
15. War in the Ice	SPI	1/79	12	6.1	13	6.4	5	4.5
16. Titan Strike	SPI	4/79	5	6.1	12	6.0	3	5.5
17. Mayday	GDW	1/79	6	6.1	9	5.8	2	3.0
18. Dark Nebula	GDW	8/80	6	6.1	6	6.0	2	2.5
19. Outreach	SPI	11/77	9	6.0	22	6.0	5	4.0
20. Black Hole	MG	6/78	3	6.0	8	5.0	2	6.5
21. Alpha Omega	AH	7/77	14	6.0	6	9.0	1	0.0
22. Starfire	TFG	5/78	4	6.0	5	6.5	2	4.5
23. Bloodtree Rebellion	GDW	8/79	13	6.0	4	6.7	6	2.0
24. Intruder	TFG	2/80	4	6.0	4	6.2	3	3.0
25. Double Star	GDW	8/79	10	6.0	4	5.5	5	5.0
26. Olympia	MG	5/78	3	5.9	11	5.5	1	0.0
27. Chitin I	MG	5/77	3	5.8	14	5.5	1	5.5
28. Alien Space	LZ	1/74	7	5.8	8	4.0	2	5.0
29. Godfire	MG	5/76	15	5.8	7	7.0	6	3.0
30. Starweb (PBM)	FBI	na	5	5.8	4	5.0	0.0	0.0
31. Snapshot	GDW	6/79	8	5.7	8	6.5	2	0.0
32. Asteroid Zero-Four	TFG	7/79	4	5.7	4	7.0	3	5.0
33. Star Soldier	SPI	1/77	10	5.6	22	7.1	2	3.5
34. Dune	AH	6/79	15	5.6	8	3.5	3	1.0

Title	Pub.	Pub. Date	Price (\$)	Accept. Rating	% Played	Complex Rating	Playing Time	Solitaire Playability
35. Ice War	MG	6/78	3	5.5	11	5.3	2	6.5
36. Belter	GDW	6/79	12	5.5	5	5.6	5	2.5
37. Cosmic Encounter	EP	8/77	12	5.4	5	3.5	2	1.0
38. Rivets	MG	6/77	3	5.3	10	4.6	1	1.0
39. Metamorphosis: Alpha	TSR	1/77	5	5.3	9	6.0	9	1.0
40. Starfall	YAQ	6/79	14	5.2	8	6.5	3	1.5
41. Hot Spot	MG	6/79	3	5.1	5	4.8	1	2.5
42. Worldkiller	SPI	3/80	6	5.0	16	3.9	2	4.5
43. Cerberus	TFG	6/78	4	5.0	5	5.0	2	1.0
44. Artifact	MG	6/80	3	5.0	3	4.6	1	1.0
45. Invasion: Air Eaters	MG	6/79	3	4.8	8	4.7	1	1.0
46. Star Lord	FBI	9/73	5	4.8	2	5.4	4	4.5
47. Holy War	MG	6/79	3	4.3	6	4.8	1	1.0
48. Annihilator/One World	MG	6/79	3	3.9	6	3.6	1	1.0

## FANTASY

1. War of the Ring	SPI	1/77	18	6.8	30	5.7	5	4.5
2. Melee	MG	6/77	3	6.8	21	5.3	1	6.5
3. Wizard	MG	6/77	3	6.8	16	5.0	1	6.0
4. Death Test	MG	6/77	3	6.7	12	4.7	1	1.0
5. In the Labyrinth	MG	6/80	20	6.7	6	6.7	5	0.0
6. Timetrip	SPI	8/80	8	6.6	18	5.7	2	5.0
7. John Carter	SPI	5/79	20	6.6	11	6.7	4	5.5
8. Deathtest 2	MG	6/80	3	6.6	6	5.4	1	1.0
9. Dungeons & Dragons	TSR	12/74	10	6.4	30	7.0	8	1.0
10. Gondor	SPI	11/77	5	6.1	26	6.5	4	5.5
11. Sorcerer	SPI	10/75	9	6.1	25	6.0	3	6.0
12. White Bear Red Moon	TC	6/75	10	6.1	7	7.0	3	6.0
13. DragonQuest	SPI	6/80	10	6.0	12	7.2	5	0.0
14. Sauron	SPI	11/77	5	5.9	25	6.5	4	5.5
15. Deathmaze	SPI	1/79	5	5.8	14	5.7	3	5.0
16. Magic Realm	AH	6/79	16	5.7	6	9.0	5	0.0
17. Time War	YAQ	6/79	14	5.7	3	4.0	1	4.5
18. Barbarian Kings	SPI	7/80	8	5.6	24	5.4	3	0.0
19. Lankmar	TSR	8/76	12	5.6	6	4.5	4	3.0
20. Godfire	MG	6/76	15	5.6	4	7.0	6	3.0
21. Swords & Sorcery	SPI	7/78	18	5.5	13	6.3	4	6.0
22. Wizard's Quest	AH	6/79	15	5.4	8	1.0	1	0.0
23. Elric	TC	6/77	13	5.2	5	7.0	3	0.0
24. Atlantis, 12500 BC	EG	7/76	4	5.0	3	3.5	2	5.0
25. Swordquest	TFG	2/80	4	5.0	2	6.0	2	2.0
26. Beastlord	YAQ	6/79	19	4.8	6	5.0	3	4.5
27. Bunnies & Burrows	FGU	7/76	6	4.7	3	6.5	4	0.0
28. Treach, Trajan (PBM)	FBI	5/80	16	4.4	1	4.6	na	0.0
29. Warlocks & Warriors	TSR	3/77	8	3.4	3	4.5	4	3.0

**Publisher Abbreviations:** AH = Avalon Hill; C-C = C in C; EG = Excalibur Games; EP = Eon Products; FBI = Flying Buffalo; F&F = Fact & Fantasy; FGU = Fantasy Games Unlimited; GDW = Game Designers' Workshop; LZ = Lou Zocchi; MG = Meta-gaming; OSG = Operational Studies Group; SC = Simulations Canada; SPI = Simulations Publications, Inc.; TC = The Chaosium; TFG = Task Force Games; TSR = Tactical Studies Rules; YAQ =

Yaquinto. **Price:** Taken from the latest available catalogue from the publisher where available; otherwise from the latest Zocchi mail order catalogue. Rounded off to the nearest dollar. **Acceptability Rating:** The game's overall popularity from the latest available S&T Feedback rating. **% Played:** The percentage of people of all those responding to the Feedback who rated the game (having played it in the previous 12 months). **Complexity Rating:** The

relative complexity of the game on a scale of 1 (simplest) to 9, from the latest available MOVES Feedback rating when available, or an estimate by the staff of S&T. **Playing Time:** in hours. From MOVES or estimated by the staff. **Solitaire Playability:** From MOVES or estimated by the staff. Aid in updating and correcting information contained in the Games Rating Chart is solicited; write to "Editor, Games Rating Chart" c/o SPI.

## SPI Summer Convention Schedule:

We'll be at four major conventions this summer — be sure to attend if you can and participate in our seminars and events. See you!

**Strategy & Tactics Subscriber Seminar.** Where we're going and what changes we would like to make in the upcoming year. (All cons)

**Ares and Moves Subscriber Seminar.** The new Ares schedule for the coming year and plans for innovations in Moves. (All cons)

**Inside SPI.** An overview of SPI's creative and business operations from inception of product to delivery.

**SPI's Universe.** John Butterfield talks about SPI's Origins role-playing release, *Universe*. John will also generate a sample star system complete with planets as part of his demonstration. (All cons)

**The World of DragonQuest.** David Ritchie and friends discuss upcoming *DragonQuest* products, field questions, and recruit GM's, testers and designers of *DragonQuest* material. (All cons)

**Great Battles of the Civil War.** The three newest games in this popular SPI series are discussed, along with projects further down the road including *Antietam*, *Chickamauga*, *TSS 2nd Edition*, and *Red River*. (All cons)

**Works in Progress, Modern.** A briefing on the newest installment in the Central Front Series, and the upcoming Modern Quarterly and World War III projects. (All cons)

**SF/Fantasy Works in Progress.** A discussion about SPI's current science fiction and fantasy titles with special emphasis on the upcoming *Blows Against the Empire* and *Legion of Space*. (All cons)

**Spi:it Meeting.** Brad Hessel and David Ritchie meet and greet attending SPIRIT members, recruit answermen, researchers, writers, and designers, and reacquaint themselves with old friends. (All cons)

**SPI Roast.** All staffers present at the con are pursued by grognards waving torches and pitchforks. (All cons)

**Spies Tournament.** \$1000 prize. (Origins only)

**DragonQuest Adventure.** A sneak preview of Paul Jaquay's soon-to-be-released *DragonQuest* adventure, "The Enchanted Wood." (All cons)

**The Forbidden Way.** An adventure for SPI's new role-playing game, *Universe*, will be GM'ed by the game's designer, John Butterfield. (Origins; Gen Con East; Gen Con only)

**Chickamauga Tournament.** (Origins — National Championship; Gen Con East only)

**Creature Tournament.** (Origins only)

Write away today for pre-registration information for the convention of your choice! (Note — please do *not* write to SPI, except to enter the Origins *Spies* tournament.)

### MichiCon 10

12-14 June 1981/Rochester, MI

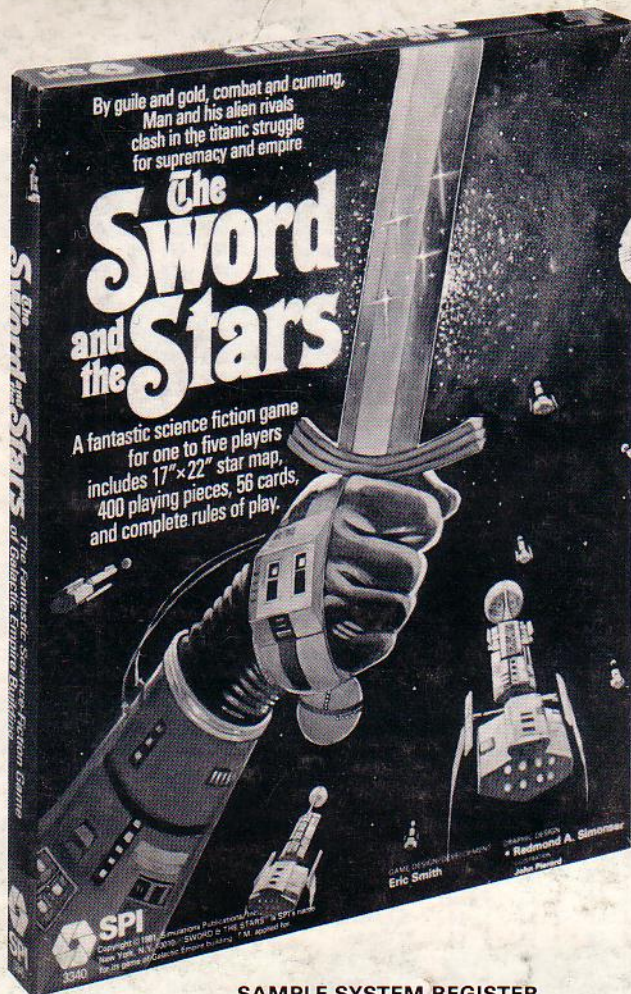
Metro Detroit Gamers

MichiCon 10, Box 787

Troy, MI 48099

### Origins '81





## Build an Empire that stretches across a galaxy!

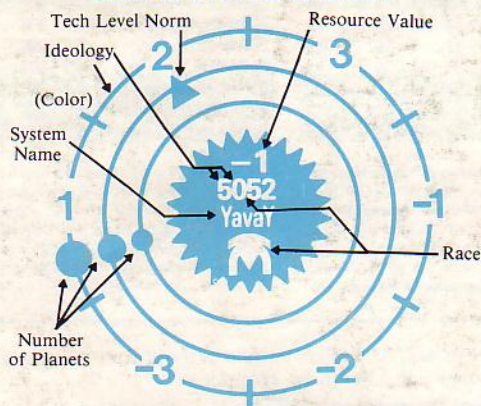
*Sword and the Stars* is a game of Galactic Empire building in which one to five players guide the destinies of star-faring races as they expand from star system to star system. Based on SPI's popular *Empires of the Middle Ages*, *Sword and the Stars* simulates the dynamics of the creation, expansion, and perpetuation of an empire that stretches across hundreds of light years. Each player controls the central government of one race; during a year, the race may attempt to expand its range of operations through the creation of a StarGate, defend its system through the construction of a GuardianWeb, improve its technical level, encourage trade, or go on raids of pillage and conquest. Special rules cover the Confederation of Worlds, random events (from advances and failures of technology to the toppling of governments), colonization, and the appearance of alien raiders. *Sword and the Stars* includes a 17" x 22" map showing one quarter of a spiral galaxy, 56 Year Cards, 400 cardboard playing pieces, rules, and various playing aids.

SECTOR CHECKS: 1,2.

Card Nr. 42

Operation	Result	Target	Act. Base
CONQUEST	C(5►)	-1(3►)	-1(◄2)
RAID	-	-1(3►)	-1(◄3)
GOVERN	-	-	+1(4►)
COMMUNICATE	T	-	-
GUARDIAN WEB	G(8►)	-	-1(◄8)
STARGATE	S(8►)	-	-1(◄8)

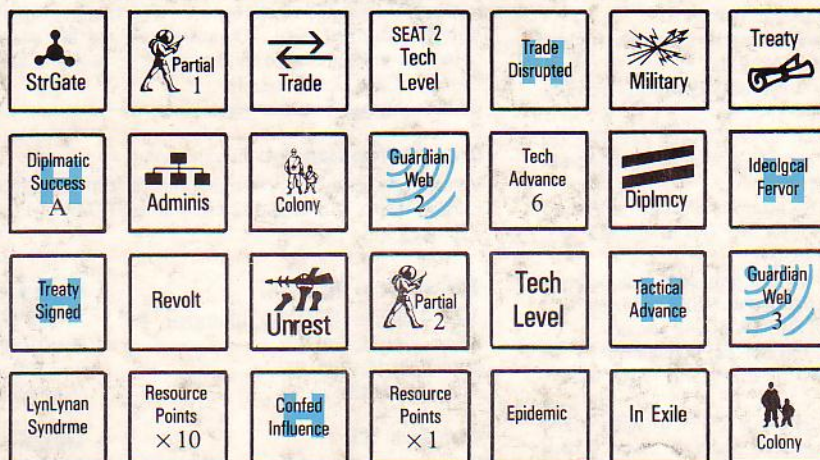
SAMPLE SYSTEM REGISTER



SECTOR CHECKS: None required.

Card Nr. 56

Operation	Result	Target	Act. Base
CONQUEST	C(8►)	-	-1
RAID	R(1►)	-1	-
GOVERN	-	-	+1
COMMUNICATE	-	-	-
GUARDIAN WEB	G(1►)	-	-1(◄1)
STARGATE	S(1►)	-	-1(◄1)



Now available for \$12 through retail outlets nationwide!



**Fighting Sail Counter Section Nr. 1 (140 pieces): Front**  
 Quantity of Sections of this identical type in game: 1. Total Quantity of Sections (all types) in game: 1.

A	A	A	A	A	A	A
A	A	A	A	A	A	A

NEUTRAL











C	C	C	C	C	C	B	B	B
C	C	C	C	C	C	B	B	B

A	A	A	A	A	A	A
A	A	A	A	A	A	A

A	B	B	B	B	B	B	B	B
A	A	B	B	B	B	B	B	B

<i>Guerriere</i>  BR	<i>Levant</i>  BR	<i>Cyane</i>  BR	<i>Wenzel</i>  BR	<i>Frolic</i>  BR
54-A-5-8	46*A-6-8	52*A-5-8	52-A-6-9	52*A-6-8
<i>Victorious</i> 				
				62-B-3-9

BRITISH

<i>Citrus Scarborough</i>  BR	<i>Serapis</i>  BR	<i>Bell</i>  BR	<i>Lord Prevost</i>  BR	<i>Queen Charlotte</i>  BR
46-A-6-8	53-A-5-8	35-A-7-7	42*A-7-7	44*A-6-8
<i>Hunter</i> 	<i>Detroit</i> 	<i>Chippeway</i> 	<i>Shannon</i> 	<i>Epervier</i> 
	45-A-6-8	32-A-7-7	55-A-5-9	46-A-7-8




<i>Kingsfisher</i>  BR	<i>Magicienne</i>  BR	<i>Acacia</i>  BR	<i>Atlas</i>  BR	<i>Donegal</i>  BR
51-A-6-8	53-A-5-8	54-B-5-8	62-C-3-8	62-C-3-8
<i>Conopus</i> 	<i>Agamemnon</i> 	<i>Spencer</i> 	<i>Northumberland</i> 	<i>Superb</i> 
	61-C-3-8	62-B-3-8	62-B-3-8	62-A-3-8

<i>Diomedé</i>  FR	<i>Imperial</i>  FR	<i>Alexandre</i>  FR	WIND	WIND
51-B-3-6	61-B-1-6	52-A-3-6		
<i>Natchiad</i> 	<i>Manetouck</i> 	<i>Mercur</i> 	<i>Jena</i> 	<i>Rivoli</i> 
	35-C-7-6	41-A-6-6	41-B-6-6	51-B-3-6

FRENCH

<i>Diligente</i>  FR	<i>Felicite</i>  FR	<i>Comete</i>  FR	<i>Chesapeake</i>  US	<i>Wasp</i>  US
44-A-5-6	44-A-5-6	44-A-5-6	54-A-5-8	52*A-6-9
<i>Brave</i> 	<i>Jupiter</i> 	<i>Scorpion</i> 	<i>Niagara</i> 	<i>Lawrence</i> 
	51-B-3-6	41-A-7-6	45*A-6-6	45*A-6-7

UNITED STATES

<i>Constitution</i>  US	<i>Pallas</i>  US	<i>Alliance</i>  US	<i>Brhonne Richard</i>  US	<i>Trippé</i>  US
56-A-4-9	43-B-6-6	41-B-5-4	45-C-5-8	34-A-7-6
<i>Tigrass</i> 	<i>Porcupine</i> 	<i>Somers</i> 	<i>Caledonia</i> 	<i>Ariel</i> 
	35-A-7-6	41-A-7-6	43-A-7-6	43-A-7-6



**Fighting Sail Counter Section Nr. 1 (140 pieces):** Back

2 AHEAD 5 4	2 PORT 5 4	2 STARB 5 4	2 TACK 5 4
2 AHEAD 5 4	2 STARB 5 4	2 STARB 5 4	2 TACK 5 4
2 PORT 5 4	2 STARB 5 4	2 WEAR 5 4	2 WEAR 5 4
2 AHEAD 5 4	2 STARB 5 4	2 PORT 4 3	2 TACK 4 3
2 AHEAD 5 4	2 STARB 5 4	2 PORT 4 3	2 WEAR 4 3
2 AHEAD 5 4	2 PORT 5 4	2 PORT 4 3	2 STARB 4 3
2 AHEAD 5 4	2 PORT 5 4	2 AHEAD 4 3	2 STARB 4 3
2 AHEAD 5 4	2 PORT 5 4	2 AHEAD 4 3	2 STARB 4 3
2 TACK 0 4	2 PORT 5 4	2 AHEAD 4 3	2 STARB 4 3
2 TACK 0 4	2 TACK 0 4	2 AHEAD 4 3	2 PORT 4 3

Conopus  0-C-3-8 BR	Agamemnon  0-C-3-8 BR	Spencer  0-B-3-8 BR	Northumberland  0-B-3-8 BR	Superb  0-A-3-8 BR
Kingfisher  0-A-6-8 BR	Maquienne  0-A-5-8 BR	Acasta  0-B-5-8 BR	Atlas  0-C-3-8 BR	Donegal  0-C-3-8 BR
Hunter  0-A-7-7 BR	Detroit  0-A-6-8 BR	Chippewaw  0-A-7-7 BR	Shannon  0-A-5-9 BR	Epervier  0-A-7-8 BR
Crisis Scarborough  0-A-6-8 BR	Scarpis  0-A-5-8 BR	Belt  0-A-7-7 BR	Lord Prevost  0-A-7-7 BR	Queen Charlotte  0-A-6-8 BR
Guerriere  0-A-5-8 BR	Levant  0-A-6-8 BR	Cyane  0-A-5-8 BR	Weazel  0-A-6-8 BR	Victorious  0-B-3-8 BR
			Lydia  0-A-5-9 BR	Fraloc  0-A-6-8 BR

[illegible]



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