

run 5



THE JOURNAL OF STRATEGIC STUDIES GROUP

Issue 17

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Featured in this Issue

- * **Malaya** - an integrated series of scenarios for the campaign of 1941-2
- * **Cross Keys & Port Republic** - Stonewall Jackson in the Shenandoah
- * **Warlords Replay** - campaigning in Illuria; with some tips on strategy
- * **IBM Carriers at War** - design notes and a preview of the construction kit

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Editor

Ian Trout

Assistant Editor

Gregor Whiley

Contributing Editors

Roger Keating

Gary Makin

Danny Stevens

Malcolm Power

Mark Holman

Andrew Taubman

U.S. Operations

John Gleason

Illustrator

Nick Stathopoulos

Mentor

Ken Trout

Colour Artwork

John Mockridge

Graphus Pty Limited

Printing

Preston Print

Pty Limited

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Australian Office

P.O. Box 261, Drummoyne, NSW. 2047. Tel (02) 819-7199. Fax (02) 819-7737.

American Office

8348 Monticello Drive, Pensacola, FL. 32514. Tel (904) 494-9373. Fax (904) 494-9374.

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Online Addresses

Compuserve: Strategic Studies Group-72040,34

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GENie: SSG

Disk Subscriptions

Disk subscriptions are now available for IBM, Macintosh and Amiga users. The cost is the same for all formats.

IBM users must tell us whether they prefer 3.5" or 5.25" format. If you don't specify a format, you will receive the 5.25" diskette. If you wish to switch disk subscriptions from one machine format to another, just let us know.

When we find the time, we intend to upgrade all the scenario disks from back issues into the new formats and allow new users to acquire them or current users to upgrade to them. We'll keep the cost as low as possible; it will depend on how much time it takes and how many scenarios we can fit onto a disk.

Upgrading to New Machines

We have received a large number of requests from our users to upgrade a particular title from one machine to another. In response to this demand, we have decided upon the following policy.

Any title from our range may be upgraded from one machine to another for a cost of half the retail price of the new version. You must send us the original program disk and the front page of the manual from that game. We will send you a complete copy of the new version of the game.

For example, if you wish to upgrade a C-64 version of *Halls of Montezuma* to the IBM/Tandy version, you should send us the original C-64 disk, the front page of the manual and the appropriate cheque, money order or MC/Visa number.

North American users must send their components and funds to our US Office. Everybody else must use our Australian Office. The addresses are on page 4.

EDITOR'S CHANCE

MORE EXCUSES. . .

It gets harder and harder for this editor to think up satisfactory excuses to explain yet another delay in this magazine's publishing schedule. We don't like to keep you waiting but somehow we always seem to do just that. If anyone out there thinks they can do better, please read the accompanying advertisement... we are looking for a capable editor for Run 5!

SSG had a pretty good year in 1991. Moving our US Office from California to Florida and taking on the task of selling directly in North America has worked out well. Most of the credit for this has to go to our long-serving (suffering?) American representative, John Gleason. He has been awarded a Hero of Work medal.

In consequence, we can afford to appoint a new editor for the magazine... if we can find some-one suitable. That means I'll only be the chief cook and bottle washer in the admin, financial, production, art and game design departments. Too easy!

CARRIERS AT WAR

The IBM version is almost finished and is easily the very best game we have ever done. Our revolutionary intelligence structure *really* works so that it is the scenario designer who gets to implement the battle plans for all the forces. It will be comforting for you all

An Important Note for Amiga Subscribers

The *Decisive Battles* game system is still in development for the Amiga. It will be available later this year.

Therefore, subscribers will receive only the Malaya scenario on the Issue 17 scenario disk. The missing Cross Keys/Port Republic scenario will be sent to you as soon as it is available.

to know that when the computer player kicks your butt, it is really me doing the kicking! Don't bother writing in to tell me of the rare occasions where the boot is on the other foot.

We intend to package the construction kit for *Carriers at War* as a separate product. There are three good reasons for this decision. We don't want to add any more time to the eventual release date. We don't want to make the game's retail price any higher than we have to. And, lastly, it gives us an opportunity to provide additional scenarios as well as variants for the original ones.

Intelligence files (really sets of what we call WarRoom™ cards) for each side can be created separately so that, for example, you can test your plans for the Japanese forces at Coral Sea against ours or a friend's. In fact, this is how Gregor and I have created the intelligence files for the six scenarios in the game. Gregor prepares the Allied plans and I prepare the Japanese plans. Repeated testing exposes any flaws in our original plans and we correct these by the addition of new cards or the modification of existing ones.

I expect that future issues will contain improved plans for all the scenarios as the system is so infinitely flexible that the more you play a scenario, the tougher you can make the computer opponent.

Looking ahead, we can use this style of intelligence structure for any environ-

ment which will make our future releases just as exciting and the quality of the artificial intelligence we supply second-to-none!

MAGAZINE CHANGES

Issue 18 will see the first IBM *Carriers at War* scenario. (Apple II and Commodore 64 users will get an original version edition of the scenario.) It covers the Allied landing on Guadalcanal with several variants to examine what could have happened had the Japanese been able to send a carrier group down there to poke its nose in.

One look at the huge number of graphic files and the even huger number of data files which are necessary to make up a scenario will make you realize it is no longer possible to provide the scenario data in tabulated form in the magazine. If you want to play the CAW scenario, you will have to get the disk.

Our other game systems will still have tabulated data and variants for CAW intelligence files will be provided in tabulated form. Non-disk subscribers can get the disk for \$12.00.

SUBSCRIPTION CHANGES

Apple II, Apple IIGS and C64 disk subscriptions will cease from Issue 20.

Continued on p. 48

EDITOR WANTED (desperately)

Strategic Studies Group is looking for an Editor for our magazine, *Run 5*. We want an experienced, talented, punctual and tolerant person with an abiding interest in strategy games...

If you meet these criteria, everything else is negotiable. Write or call Ian Trout for more details

CURRENT VERSION NUMBERS FOR ALL SSG GAMES

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AII (3.01), C64 (3.01), Mac (3.1), IBM (3.0), IIGS (3.1), Amiga (3.1)

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AII (1.1), C64 (1.1), IBM (1.0)

Europe Ablaze

AII (1.0), C64 (1.0)

Battlefront

AII (1.0), C64 (1.0)

Russia

AII (1.0), C64 (1.0)

Battles in Normandy

AII (1.0), C64 (1.0)

Halls of Montezuma

AII (1.0), C64 (1.0), Mac (1.33), IBM (3.2*), GS (1.1), Amiga (1.2)

Decisive Battles of the American Civil War (Vol I)

AII (1.0), C64 (1.0), Mac (1.2), IBM (2.2)

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Fire King

C64 (1.0), IBM (1.0)

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Mac (1.2), IBM (1.01), GS (1.1), Amiga (1.0), Atari ST (1.0)

Panzer Battles

AII (1.0), C64 (1.0), Mac (1.2), IBM (3.2*), GS (1.1), Amiga (1.2)

Warlords

IBM (2.1), Amiga (2.1), Mac (1.0)

Notes

* The difference between the .2 and .1 versions is the addition of the + and - key functions which allow you to vary the speed of the unit animation with "Full Map" graphics. This is especially useful with fast 386 machines.

THE Q STORE

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zine and \$AUD 2.00 for each subsequent

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Plus \$AUD 2.00 surface shipping (max.) or
\$AUD 4.50 air shipping (max.)

LETTERS TO THE EDITOR

Gentlemen,

The litany of support: I'm a long time *Run 5* supporter, (between subscriptions and back issue purchases I own all of them), and I own copies in C-64 format of *Carriers at War*, *Russia*, *Battlefront* and *Halls of Montezuma*. Almost two years ago I bought an Amiga, and now own the Amiga *Reach For The Stars*.

Thank you so much for the conversion of *Halls of Montezuma* to Amiga and for your generous upgrade policy.

Also, thank you for a great line-up of games and support in the form of Mr Gleason and the *Run 5* magazine. They're both terrific.

Now for the pitch: please continue to support the Amiga, especially for your historical wargames (you've done pretty well in the other categories, such as *Gold of the Americas*, *RFTS* and *Warlords*). I realise the Amiga market is relatively small in the U.S., but Amiga owners are a fiercely loyal bunch, and Amiga has carved out a strong market niche, video. And the Amiga is strong in Europe.

But let's face it; I'm selfish. I love your games and your magazine, and I love my Amiga. I simply don't want to be left out.

There's my two cents. Thanks a bunch.

Sincerely

Michael Phebes

Littleton, CO

USA

Dear Mr Trout,

In our conversations, I had also mentioned the thought of buying an IBM compatible. I really like my Amiga and rather than forsake it for "Big Blue", I have decided to purchase a bridge board so I can have the best of both worlds, this purchase though will not be immediate. In the interim, I have

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THE BATTLES OF CROSS KEYS AND PORT REPUBLIC

Stonewall Jackson in the Shenandoah

June 8th - 9th, 1862

A Scenario for the Decisive Battles Game System

by Ian Trout

On May 15th, 1862, Union General George Brinton McClellan made his headquarters on the grounds of the 'White House', the home of Mrs Robert E. Lee. He and his 100,000 strong Army of the Potomac were on the very outskirts of Richmond, the capital of the Confederacy.

The capture of Richmond would surely knock the stuffing out of the Rebels and bring the war to a speedy conclusion. The next day McClellan received a missive from Secretary of War Stanton informing him that McDowell's I Corps, presently encamped north of the Rappahannock near Fredericksburg, would be despatched south to join him. McDowell would move as soon as he was reinforced by Shields' division from Banks' army in the Shenandoah. This force would add another 40,000 men for the assault on Richmond.

General Robert E. Lee, Jefferson Davis' military advisor, in command of the defenses of Richmond, but *not* the Army of Virginia protecting it, received this information pretty much at the same time. It was the one circumstance he could not provide for. Out-numbered three to two, Johnston's 65,000 strong Army of Virginia would have its work cut out keeping McClellan at bay. If McDowell's expected advance down the 'Richmond, Fredericksburg and Potomac Railroad' materialised, Johnston's line would be

stretched too thin and the fall of Richmond would be a matter of days. Recognising a problem is one thing; effecting a solution is another! The

situation further north was no less grim than on the Peninsula. General 'Stonewall' Jackson was in the Shenandoah Valley with about 6,500 men. The 2,500 men of Field's brigade screened the Federals on the Rappahannock while in reserve around Gordonsville were 9,000 men under the command of General 'Baldy Dick' Ewell. A further 3,000 men under General Edward Johnson were further south still, watching the Allegheny passes.

READ THIS FIRST

The Battles of Cross Keys and Port Republic were small affairs as Civil War battles go; some 15,000 men on each side participated. As originally designed, the scenario employed about 20 brigades and a map area of 18 x 18. Union forces south of the Shenandoah comprised just two brigades of Shields' division. Put simply, two units did not give enough flexibility to recreate the action that occurred there.

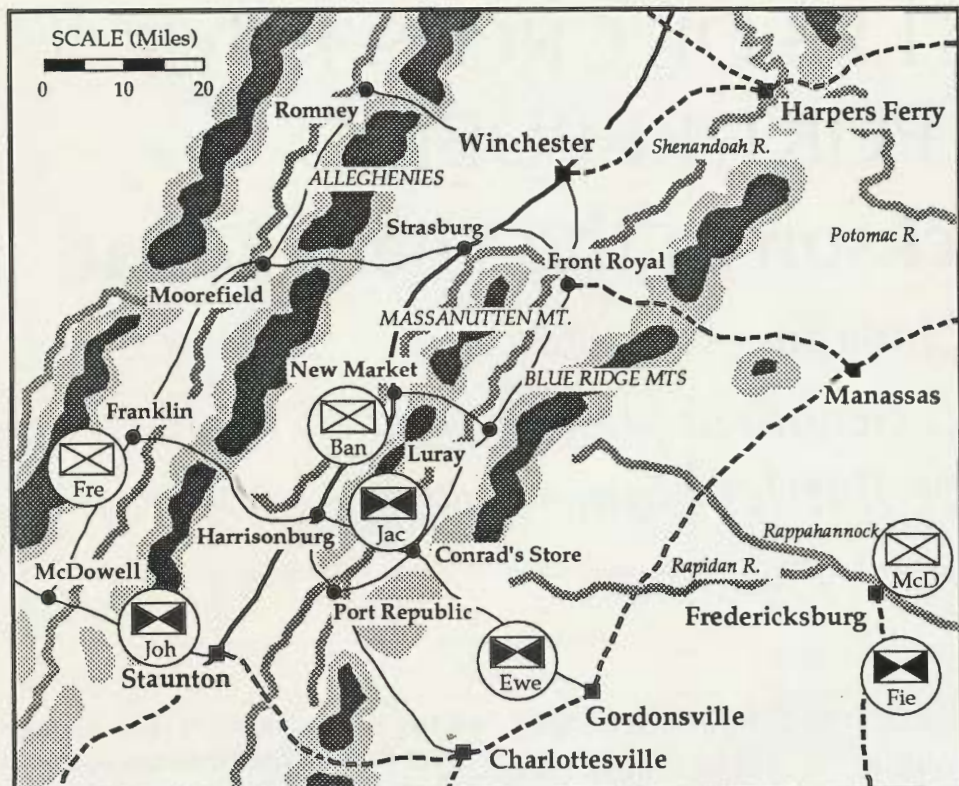
What about a change of scale? What if we made the regiment the unit of manoeuvre, expanded the ground scale and doubled the troop scale? After quite a bit of fiddling about, that's what we've done.

The ground scale is 250 metres per hex. The troop scale is 50 men per strength point and 1 gun per artillery strength point. Each unit is a regiment or (occasionally) a battalion, while brigade HQs are treated as divisions and division HQs

as corps. Except for the odd screen reference to corps and divisions (which should be read as divisions and brigades), we have found the scenario plays very well.

Just remember when you're entering the data to create the scenario that the scale has changed; i.e. Allen's regiment (the 2d Va) of Winder's brigade has a game strength of 500 men and 4 guns; the actual strength was about 250 men accompanied by a section of 2 guns.

As far as the game itself is concerned, there are a couple of points to be aware of. Shields, and his two uncommitted brigades, Kimball's and Ferry's, are included in the Federal Order of Battle. They have a low likelihood of arriving in time to have any impact on the battle, but that uncertainty will give the Confederate commander something to think about when he disposes his forces.



Situation On May 1st, 1862

CONFEDERATE FORCES

- ⊠ Jackson (6,500)
- ⊠ Ewell (9,000)
- ⊠ Field (2,500)
- ⊠ E. Johnson (3,000)

FEDERAL FORCES

- ⊠ McDowell (30,000)
- ⊠ Banks (22,000; incl. dets)
- ⊠ Fremont (18,000; some en-route)

Opposing these Confederate forces were three Federal armies. Banks with 22,000 (including Shields division) faced Jackson in the Valley, McDowell had 30,000 men and Frémont had assembled 18,000 men in the Alleghenies. Here the odds were three to one... against! But at least there was room for manoeuvre.

In April, Lee laid the groundwork for the plan which would be his one chance to avoid disaster. He 'borrowed' 10,000 men from the Carolinas (Burnside's operations down there having fizzled out) and sent them up to bolster Field at Fredericksburg. He wrote to both Jackson and Ewell, outlining his thoughts. These two armies, combined, would be large enough to defeat in detail either Banks or Frémont; and such a defeat would surely keep McDowell in place, if not convincing him to reinforce his col-

leagues in the Shenandoah.

They were an odd couple, Jackson and Ewell; all they had in common were the agonies of chronic dyspepsia. Jackson wrote back to Lee that such a scheme was indeed practicable and proposed three alternative operations. He could combine with Ewell and strike directly at Banks; he could march north down the Valley and attack Banks in the rear; or he could combine with Johnson and attack Frémont. He preferred the latter plan, which would leave him free to deal at leisure with Banks.

In all of Jackson's communications regarding impending battles or plans for their execution, there is the overwhelming certainty that they will be decisive. He expected a defeated opponent to be out of action almost indefinitely, leaving him free to do as he wished. Even at this early stage of the war, if experience can count for any-

thing, battles were not decisive. The enemy might be forced to retreat a little, they might lose a few more men; but a day or two later those supposedly defeated soldiers would be back in arms again, and ready for trouble.

Lee had a more realistic appreciation of what Jackson might achieve. A bold showing in Northern Virginia, perhaps presaging a threat to Washington, would unnerve the Federal leadership, especially Lincoln, who was always irrationally sensitive to Washington's peril. Anything at all that would prevent the reinforcement of McClellan's army could yet save Richmond. Jackson, a religious bigot of the first rank, saw only the complete annihilation of his (and God's) enemies.

Fervour and religion aside, Jackson was not without considerable military ability. He appreciated the importance of good intelligence, aggressive screening and, above all, speed of manoeuvre. It was not for nothing that his men earned the sobriquet of 'Jackson's Foot Cavalry'. His strategic planning was sound, his execution resolute; it was on the field of battle itself where his short-comings were most apparent. But more on this later.

It was not until May 1st that Lee actually found out what Jackson was up to. In great secrecy he had spirited his men south to Gordonsville where they entrained for Staunton, some 50 miles to the west. May 5th Jackson reached Staunton and immediately set out for McDowell, about 20 miles further west.

Frémont's advance guard, Milroy's brigade, had already passed through McDowell and was almost to the outskirts of Staunton. Somehow Jackson's plans had been compromised; the Federals were aware of his presence, and Milroy beat a hasty retreat back to McDowell. Jackson pursued him hotly and on the morning of May 8th brought on a battle about 2 miles east of the little township of McDowell.

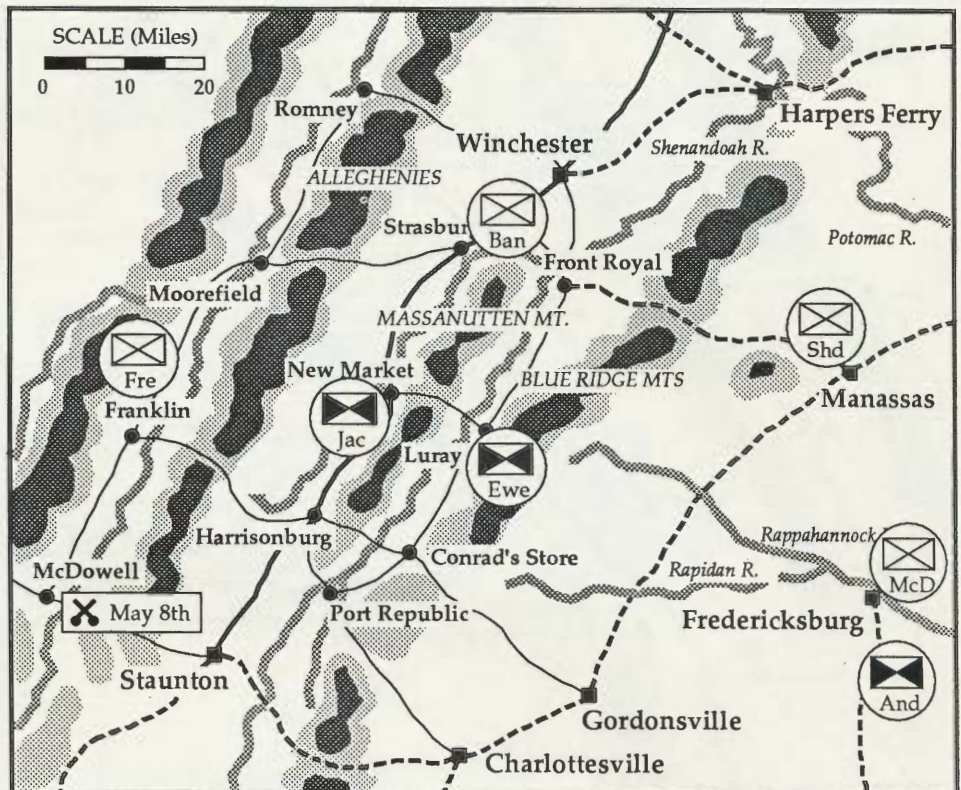
It did not go at all as planned. Another of Frémont's brigades, Schenk's, responding to Milroy's call for help, ar-

rived on the scene early that morning. The Federals now had 5,000 men to contend with Jackson's 9,000, nothing like the three-to-one odds (in his favour!) Jackson had expected. As Jackson wheeled his men into line and brought up his artillery, Schenk (assuming command) put in a skilful spoiling attack which took the Southerners by surprise. Before the Rebels could mount a counter-attack, Schenk withdrew and by early afternoon the Federals were retiring to Franklin. Jackson pursued hard but to no avail. The Federals weren't beaten and their rear-guards showed plenty of fight.

Jackson, as was his wont, claimed a crushing victory. It was far from that! True, Frémont had been forced to retreat and the immediate threat to Staunton neutralised. But Confederate casualties were the best part of 500 men while Union losses were scarcely half as many. More importantly, Frémont in no way could be considered beaten and Jackson was now too far from Ewell's position to be of any help to him if Banks' tried anything in the valley.




Sure enough, on May 13th, Ewell informed Jackson that Banks' army, presently encamped near Harrisonburg, was preparing to move. There was nothing for it but to return to the Valley. In four days Jackson marched his men from the outskirts of Franklin all the way to New Market, only to find that Banks' move had been north, away from Ewell. Lee's worst fear was being realised. Banks' had received orders to send Shields' division to join McDowell and that movement was already under-way.

There was trouble in another quarter too. Johnston, commanding the Army of Northern Virginia, was supposedly in charge of all the Valley forces as well. He didn't take kindly to interference; from Lee or anyone else. So it came about that Ewell received conflicting orders. Johnston told him on the 15th that he was to move east if Banks did, shadowing him all the way to Richmond if necessary. At the same time Jackson ordered him up to New







Situation On May 20th, 1862

CONFEDERATE FORCES

-  Jackson (10,000)
-  Ewell (6,000)
-  Anderson (10,500)

FEDERAL FORCES

-  McDowell (30,000)
-  Banks (10,000; less Shields)
-  Shields (10,000)
-  Fremont (16,000; incl. dets)

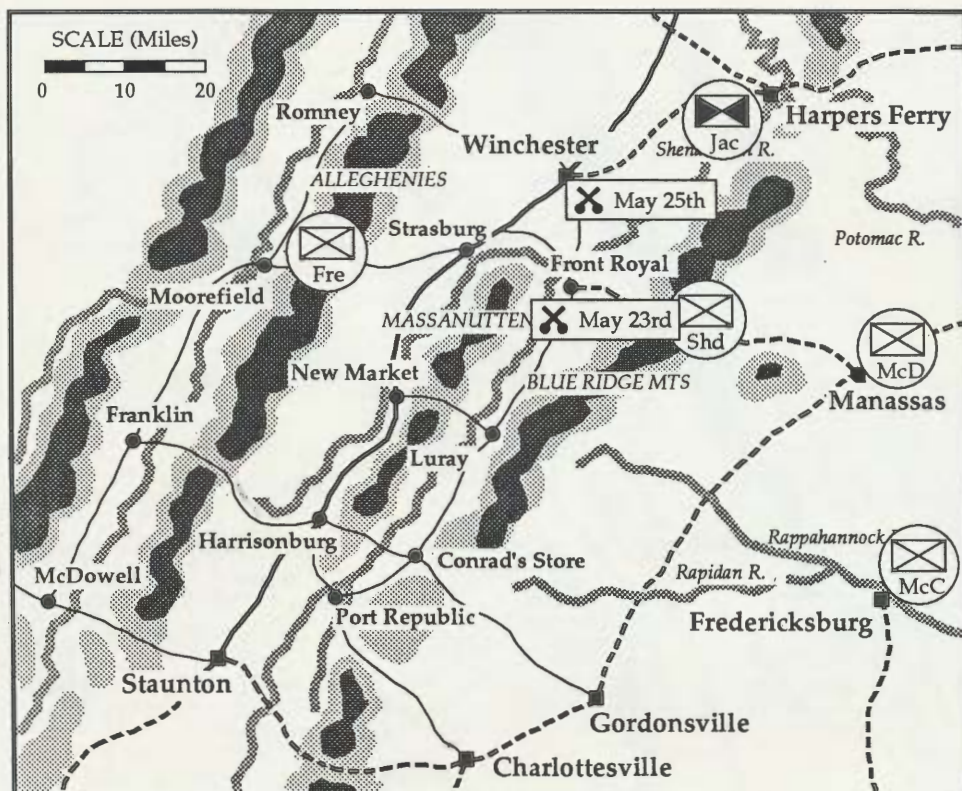
Market while Lee told him to stay where he was!

By May 20th, Shields' move to Manassas was confirmed and Ewell, conscious of Johnston's seniority, prepared to move east. Aware of Jackson's plan for a decisive engagement against Banks' reduced force, and in agreement with it, he delayed his departure long enough to give Lee a chance to convince Johnston (or rather Jefferson Davis) that the best chance to safeguard Richmond lay in developing a real threat to Washington by way of Harpers Ferry. The destruction of Banks' army would be a bonus.

By May 20th, the main body of Banks' command, about 7,000 men, had fallen back to Strasburg and entrenched there. A 1,000 man garrison held Front Royal while a further 2,000 soldiers protected his main supply dumps at Winchester.


The next 25 days were to show Jackson at his very best. The long hours of training, the fanatical zeal with which he drove all those around him paid a full dividend.

As soon as it was confirmed that Ewell's force would remain in the Valley, Jackson had his men on the road. May 22nd they were on the Valley Turnpike, the only sealed road in the region, and moving north from New Market to Banks' position at Strasburg. They stayed on this road just long enough to convince the Federal pickets that this was their line of march. Using Ashby's cavalry to conceal his ruse, Jackson crossed Massanutten Mountain through the Luray Gap and made a dash for Front Royal. Ten miles short of that town, and far enough away to be certain his presence would remain undetected, Jackson camped for the night.





Situation On May 29th, 1862


CONFEDERATE FORCES


 Jackson (15,500)

FEDERAL FORCES

 McDowell (20,000; to Front Royal)

 McCall (10,000)

 Shields (10,000; to Front Royal)

 Fremont (15,000; to Strasburg)

At crack of dawn, Ashby's cavalry and an advance brigade of Ewell's infantry were on the road, east and west of Front Royal, ripping up rail and blocking roads. Word of the Union disaster was not going to leak out, nor would reinforcements get in. Jackson had 15,000 battle-hardened troops; the 1,000 man garrison, the luckless 1st Maryland, was to be eliminated to the last man.

The Federals showed some fight for the first hour; until the full significance of their predicament became apparent. Then they high-tailed it north to Winchester and for a moment it looked like they might escape. Turner Ashby's cavalry soon put a stop on that and by mid-afternoon all but 100 of the Union force were killed or captured. It was the one occasion where reality lived up to Jackson's expectation; fewer than 50 Confederates lost their lives.

News of the disaster trickled in to Banks that evening. Still unaware of Jackson's stealthy manoeuvre, he was sure the main Confederate body was south of Strasburg, trudging along the Valley Turnpike. By morning, however, the full extent of his peril was evident. His communications were fully compromised and, worse yet, his supply source was half a day's hard march from Jackson with no friendly troops to bar the way.

Banks was not a military man, neither by training nor inclination. He dithered away most of the morning of the 24th, more concerned for his reputation as a resolute soldier than for the safety of his army. In the end he succumbed to the pleading of his more astute subordinates and ordered an immediate retreat to Winchester.

The race was on. Front Royal to Winchester and Strasburg to Winchester

are the same distance and Jackson got away to an earlier start than Banks. But the weather had turned sour, heavy rain was falling and Banks was on the Valley Turnpike; Jackson's men were forced to slog through ankle-deep mud.

Twice the Confederate advance guard caught up with the Federals but these were isolated companies, sacrificed by Banks to buy time for a defence of Winchester. Looting became a major headache. Confederate troops, impoverished by three weeks of hard campaigning, stopped to ransack every abandoned Union wagon, every prisoner, every fallen soldier. Then worst offenders here were Ashby's cavalry; their absence on the morrow was to cost Jackson dear.

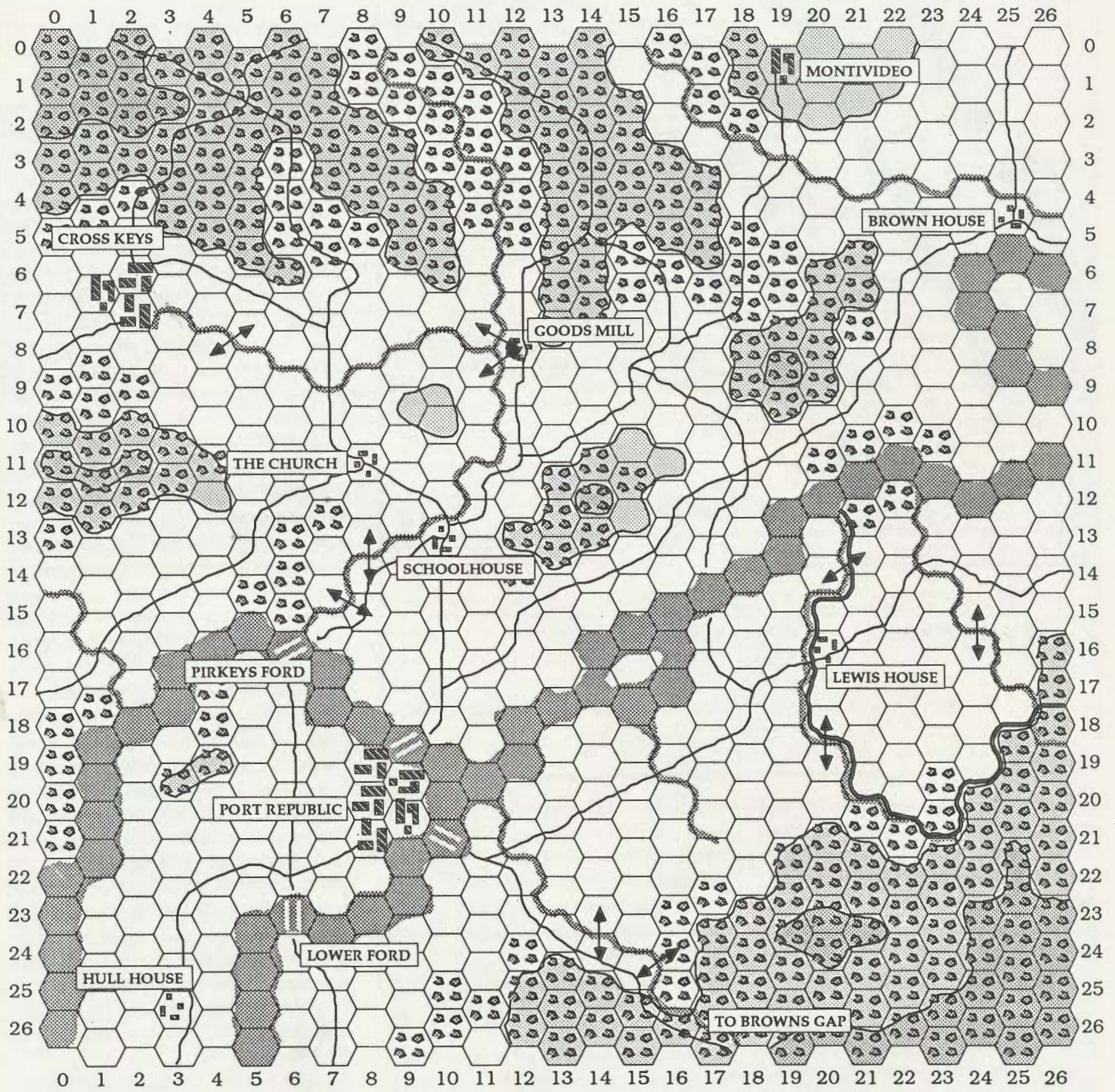
Banks got to Winchester first.

The battle of Winchester was fought on May 25th, Jackson's 16,000 against Banks' 6,500. Assailed from three directions, the Federals broke and ran; and didn't stop until they reached the safety of the Potomac a day later. No cavalry meant no pursuit and it was a frustrated Jackson who had to watch the best part of 5,000 beaten Yankees get clean away.

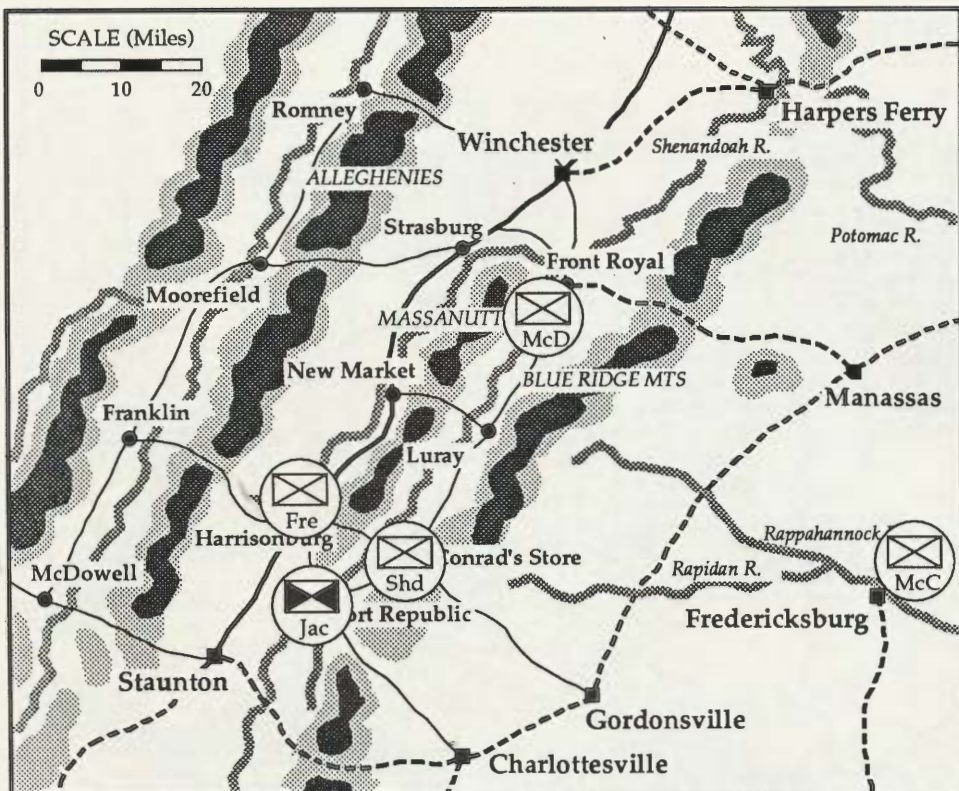
If Jackson was disappointed, Lee was elated. Away to the east, Shields' division had joined up with McDowell's corps and on the 24th they had begun their march south, to Richmond. Barely ten miles down the road, McDowell received new orders from President Lincoln. He was to abandon his advance on Richmond, leave one division to screen the Rappahannock and march, with all speed, to the Valley. Jackson's success at Front Royal had unnerved Lincoln, just as Lee had hoped. McDowell's misgivings went unheeded; Lincoln was adamant that Jackson must be more than checked, he must be destroyed once and for all.

With most of Jackson's army on the Potomac at Harpers Ferry, here was a golden opportunity to trap the wily Virginian between Frémont's column advancing east from Franklin and McDowell's men moving west from Manassas.

CROSS KEYS - Map



	FARMLAND		TOWN		ROAD		CREEK
	WOODS		DENSE WOODS		HAMLET		FORD
	ROUGH		BRIDGE		FRONT LINE		RIVER/FORD



Situation On June 7th, 1862

CONFEDERATE FORCES

🚩 Jackson (15,000)

FEDERAL FORCES

📦 McDowell (20,000)

📦 McCall (10,000)

📦 Shields (10,000; less 2 Bdes at Luray)

📦 Fremont (11,000)

Frémont went the wrong way and turned up late. Shields got to Front Royal in time, but without orders to proceed further, didn't go the extra 12 miles to close the trap at Strasburg. Jackson slipped away down the Valley Turnpike, taking with him most all of the huge quantity of stores he had captured, and his prisoners. Ewell's division had no trouble holding the road open at Strasburg against a timorous Frémont while the Stonewall brigade, the rear-guard, caught up with the main body. Jackson made camp that night at Strasburg and two days later was at New Market, safely escaped from the Federal trap.

In Richmond, Jackson's achievements took the pressure off Johnston's beleaguered army. Driven back to the outskirts of the city, a desperate Johnston planned an attack north of the Chickahominy with the aim of stalling

McClellan and preventing his juncture with McDowell's corps. The news of McDowell's about-face allowed Johnston to frame a new plan, and a much less risky one, directed against the two Federal corps south of the Chickahominy.

It was a good plan but brought completely undone by Longstreet's unauthorised detour, Smith's reluctance to come to grips with the enemy and Huger's sojourn in the swamps. Fought on the last day of May, the Battle of Fair Oaks (or Seven Pines) did have one far reaching consequence for the future of the civil war. Late in the evening a stray piece of shrapnel caught Johnston in the abdomen. He would take no further part in the war, at least for the next few months.

Notwithstanding his lack of experience, Jefferson Davis made the decision to promote Robert E. Lee to the

command of what would henceforth be known as the Army of Northern Virginia.

Back in the Valley, and after giving his exhausted troops a full day of rest, Jackson set out for Port Republic. Spring rains had flooded both forks of the Shenandoah and Jackson was able to delay both his pursuers. Frémont's men were stopped just north of New Market by a burnt bridge over the North Fork while Shields' troops were kept south of the South Fork by another burnt bridge, this one at Conrads Store. Furthermore, Frémont and Shields were denied the option of joining forces. Jackson had given himself the chance to defeat either one in detail.

The battle came upon him sooner than expected. A small force of Shields' cavalry stormed into Port Republic early on the 8th and caused immediate panic. Jackson himself was very nearly captured. A brigade of infantry and some guns soon repelled the attackers and Jackson ordered up three batteries of artillery to cover the low-lying southern side of the Shenandoah.

Meanwhile, two miles further north, near the tiny hamlet of Cross Keys, Frémont's van had blundered into a brigade of Ewell's infantry. Massed musketry tore the attack to pieces and the Federals withdrew. That single setback was enough to quench Frémont's offensive spirit for the day and for the next five hours he sprayed the Confederate positions with desultory artillery fire. He led the best part of 11,000 men and Ewell had but 5,000 to oppose him. Frémont had been among his nation's finest explorers but as a soldier he was next to useless!

Jackson had let Ewell conduct operations against Frémont without interference and he had done a steady job. Jackson was already preparing for the second part of the battle; the morrow's attack on Shields' division.

That didn't go as well. Two brigades of Federals, Tyler's and Carroll's, about 5,000 men, were drawn up line abreast three miles east of Port Republic. They were better men, and better led, than Frémont's troops. Many of them had



Jackson's Valley Opponents
John Frémont (top) and Nathaniel Banks

seen action 10 weeks earlier when Shields had bloodied Jackson's nose at Kernstown.

The Union position was solid with the right flank anchored against the Shenandoah and the left on the slopes of the rugged Blue Ridge Mountains. Impatient to get at the enemy, Jackson hurled his brigades into the battle before Ewell could get into position to unhinge the Federal left. Confederate losses were heavy and were it not for Jackson's considerable numerical superiority, and Ewell's eventual appearance on the Federal left, the result

Frémont's Command

Maj.-General John C. Frémont

Attached to Army HQ

Lloyd's Rgt (6Oh; 350 cav, 1 gun),
Conger's Rgt (3WV; 400 cav, 1 gun)

Stahel's Brigade

Wutshel's Rgt (8NY; 500 inf, 2 guns),
Meinke's Rgt (39N; 450 inf, 2 guns), von
Gilsa's Rgt (41N; 500 inf, 2 guns),
Amsberg's Rgt (45N; 550 inf, 2 guns),
Buschbeck's Rgt (27P; 550 inf, 2 guns)

Koltes' Brigade

Soest's Rgt (29N; 500 inf, 2 guns),
Schiller's Rgt (68N; 450 inf, 2 guns),
Muhleck's Rgt (73P; 500 inf, 2 guns)

Bohlen's Brigade

Kozlay's Rgt (54N; 400 inf, 2 guns),
Krzyzanowski's Rgt (58N; 500 inf, 2
guns), Hamm's Rgt (74P; 400 inf, 2
guns), Mahler's Rgt (75P; 350 inf, 2 guns)

Blenker's Division

Attached to Division HQ

Dickel's Rgt (4NY; 450 cav, no guns)

Schenk's Brigade

Swinney's Rgt (32O; 550 inf, 2 guns),
Lee's Rgt (55O; 500 inf, 3 guns), Smith's
Rgt (73O; 300 inf, 2 guns), McLean's Rgt
(75O; 400 inf, 2 guns), Cantwell's Rgt
(82O; 450 inf, 2 guns)

Milroy's Brigade

Owens' Rgt (2WV; 550 inf, 3 guns),
Thompson's Rgt (3WV; 600 inf, 3 guns),
Zeigler's Rgt (5WV; 500 inf, 3 guns),
Richardson's Rgt (25O; 500 inf, 3 guns)

Clusaret's Brigade

Trimble's Rgt (6O; 400 inf, 2 guns),
Loeser's Rgt (8WV; 450 inf, 2 guns)

Bayard's Cavalry Brigade

Wyndham's Rgt (1N); 600 cav, 2 guns),
Jones' Rgt (1Pa; 600 cav, 2 guns)

Shields' Division

Attached to Division HQ

Nelson's Rgt (1R); 300 cav, no guns)

Kimball's Brigade (Optional)

Harrow's Rgt (14I; 550 inf, 2 guns),
Mason's Rgt (4Oh; 500 inf, 2 guns),
Sawyer's Rgt (8Oh; 400 inf, 2 guns),
Evans' Rgt (7WV; 500 inf, 2 guns)

Ferry's Brigade (Optional)

Osborn's Rgt (39I; 350 inf, 2 guns),
Foster's Rgt (13I; 350 inf, 2 guns), Pond's
Rgt (62O; 500 inf, 2 guns), Voris' Rgt
(67O; 550 inf, 2 guns)

Tyler's Brigade

Dunning's Rgt (5Oh; 600 inf, 2 guns),
Creighton's Rgt (7Oh; 300 inf, 2 guns),
Buckley's Rgt (29O; 450 inf, 2 guns),
Candy's Rgt (66O; 400 inf, 2 guns),
Chamblain's Rgt (1WV; 250 cav, 2 guns)

Carroll's Brigade

Gavin's Rgt (7In; 450 inf, 2 guns),
Barrett's Rgt (84P; 300 inf, 2 guns),
Lewis' Rgt (11O; 300 inf, 2 guns),
Thoburn's Rgt (1WV; 450 inf, 2 guns)

Jackson's Valley Army

Maj.-General Thomas Jackson

Attached to Army HQ

Flournoy's Rgt (6Va; 350 cav, no guns),
Ashby's Rgt (7Va; 400 cav, no guns),
Watts' Rgt (2Va; 400 cav, 3 guns)

Winder's Brigade

Allen's Rgt (2Va; 250 inf, 2 guns),
Ronald's Rgt (4Va; 350 inf, 2 guns),
Baylor's Rgt (5Va; 400 inf, 2 guns),
Grigsby's Rgt (27V; 250 inf, 2 guns),
Neff's Rgt (33V; 300 inf, 2 guns)

Taliaferro's Brigade

Warren's Rgt (10V; 450 inf, 2 guns), A.
Taliaferro's Rgt (23V; 400 inf, 1 gun),
Williams' Rgt (37V; 450 inf, 1 gun)

Patton's Brigade

Leigh's Bn (1Va; 150 inf, no guns), Lane's
Rgt (42V; 300 inf, 2 guns), Hale's Rgt
(48V; 350 inf, 2 guns), Cunningham's
Rgt (Optional - 21V; 500 inf, no guns)

Taylor's Brigade

Seymour's Rgt (6La; 550 inf, 2 guns),
Hays' Rgt (7La; 600 inf, 2 guns), Kelly's
Rgt (8La; 450 inf, 2 guns), Stafford's Rgt
(9La; 650 inf, 3 guns), Wheat's Bn (LBn;
150 inf, 1 gun)

Ewell's Division

Trimble's Brigade

Kirkland's Rgt (21N; 450 inf, 3 guns),
Mercer's Rgt (21G; 550 inf, 1 gun),
Cantey's Rgt (15A; 400 inf, 1 gun),
Posey's Rgt (16M; 450 inf, 3 guns)

Elzey's Brigade

Walker's Rgt (13V; 400 inf, 2 guns),
Hoffman's Rgt (31V; 350 inf, 2 guns),
Duffy's Rgt (25V; 300 inf, 2 guns),
Conner's Rgt (12G; 450 inf, 1 gun)

Stuart's Brigade

Johnson's Rgt (1Md; 200 inf, 1 gun),
Scott's Rgt (44V; 300 inf, 1 gun),
Skinner's Rgt (52V; 350 inf, 2 guns),
Letcher's Rgt (58V; 400 inf, 3 guns),
Neff's Rgt (33V; 300 inf, 2 guns)

CROSS KEYS - Regiments

UNIT NUMBER	1-127	1	2	3	4	5	6	7	8	9	10	11
UNIT I.D. (Full)	[9]	Allen	Ronald	Baylor	Grigsby	Neff	Warren	A. Talia'	Williams	Leigh	Lane	Hale
UNIT I.D. (Abb)	[3]	2Va	4Va	5Va	27V	33V	10V	23V	37V	1Va	42V	48V
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Bn	Rgt	Rgt
MAP LOCATION	(x,y)	15,13	16,14	14,15	15,14	14,14	12,16	11,15	11,16	10,14	11,14	10,15
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	1	1	1	1	1	2	2	2	3	3	3
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	0	0	0	0	0	0	0	0	0	0	0
SMALL ARMS	0-31	1	1	1	1	1	1	1	1	1	1	1
ARTILLERY	0-31	14	12	15	12	12	15	14	12	0	14	12
TROOP STREN.	0-31	5	7	8	5	6	9	8	9	3	6	7
MOVEMENT	0-15	8	8	8	8	8	8	8	8	8	8	8
BATTERY STR.	0-15	2	2	2	2	2	2	1	1	0	2	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	2	4	5	3	4	5	2	5	4	6	5
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	6	6	6	5	5	5	5	5	4	5	4
REGIMENTS	0-7	1	1	1	1	1	1	1	1	0	1	1
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

UNIT NUMBER	1-127	12	13	14	15	16	17	18	19	20	21	22
UNIT I.D. (Full)	[9]	Cunningh'	Seymour	Hays	Kelly	Stafford	Wheat	Kirkland	Mercer	Cantey	Posey	Walker
UNIT I.D. (Abb)	[3]	21V	6La	7La	8La	9La	LBn	21N	21G	15A	16M	13V
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Bn	Rgt	Rgt	Rgt	Rgt	Rgt
MAP LOCATION	(x,y)	3,26	10,12	11,12	10,13	9,12	9,13	12,8	11,8	13,8	12,9	7,9
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	3	4	4	4	4	4	5	5	5	5	6
ARRIVAL	0-95	2	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	1	0	0	0	0	0	0	0	0	0	0
SMALL ARMS	0-31	1	1	1	1	1	1	1	1	1	1	1
ARTILLERY	0-31	0	12	14	12	14	15	14	12	15	11	14
TROOP STREN.	0-31	10	11	12	9	13	3	9	11	8	9	8
MOVEMENT	0-15	8	8	8	8	8	8	8	8	8	8	8
BATTERY STR.	0-15	0	2	2	2	3	1	3	1	1	3	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	3	3	6	4	3	4	4	3	2	7	5
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	5	6	6	6	6	6	6	6	6	6	5
REGIMENTS	0-7	1	1	1	1	1	0	1	1	1	1	1
LIKELIHOOD	0-7	4	7	7	7	7	7	7	7	7	7	7

UNIT NUMBER	1-127	23	24	25	26	27	28	29	30	31	32	41
UNIT I.D. (Full)	[9]	Hoffman	Duffy	Conner	Johnson	Scott	Skinner	Letcher	Flournoy	Ashby	Watts	Harrow
UNIT I.D. (Abb)	[3]	31V	25V	12G	1Md	44V	52V	58V	6Va	7Va	2Va	14I
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt
MAP LOCATION	(x,y)	6,10	6,9	7,10	2,9	3,8	3,7	2,8	9,19	8,20	3,26	26,14
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	6	6	6	7	7	7	7	0	0	0	11
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	4	1
UNIT TYPE	0-3	0	0	0	0	0	0	0	2	2	2	0
OBJECTIVE	0-23	0	0	0	0	0	0	0	0	0	1	9
SMALL ARMS	0-31	1	1	1	1	1	1	1	2	2	2	1
ARTILLERY	0-31	12	11	15	14	15	11	11	0	0	12	14
TROOP STREN.	0-31	7	6	9	4	6	7	8	7	8	8	11
MOVEMENT	0-15	8	8	8	8	8	8	8	12	12	12	8
BATTERY STR.	0-15	2	2	1	1	1	2	3	0	0	3	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	3	3	4	2	5	3	3	3	6	4	4
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	5	5	5	4	5	5	5	7	7	7	5
REGIMENTS	0-7	1	1	1	1	1	1	1	1	1	1	1
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	4	2

CROSS KEYS - Regiments (Cont.)

UNIT NUMBER	1-127	42	43	44	45	46	47	48	49	50	51	52
UNIT I.D. (Full)	[9]	Mason	Sawyer	Evans	Osborn	Foster	Pond	Voris	Dunning	Creighton	Buckley	Candy
UNIT I.D. (Abbr)	[3]	40h	80h	7WV	39f	13f	62O	67O	50h	70h	29O	66O
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt
MAP LOCATION	(x,y)	26,14	26,14	26,14	26,14	26,14	26,14	26,14	26,14	26,14	26,14	26,14
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	11	11	11	12	12	12	12	13	13	13	13
ARRIVAL	0-95	1	1	1	1	1	1	1	7	7	7	7
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	9	9	9	9	9	9	9	9	9	9	9
SMALL ARMS	0-31	1	1	1	1	1	1	1	1	1	1	1
ARTILLERY	0-31	15	17	12	15	12	14	12	17	17	11	17
TROOP STREN.	0-31	10	8	10	7	7	10	11	12	6	9	8
MOVEMENT	0-15	8	8	8	8	8	8	8	8	8	8	8
BATTERY STR.	0-15	2	2	2	2	2	2	2	2	2	2	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	2	4	4	5	5	3	6	5	6	6	6
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	5	5	5	4	4	4	4	5	5	5	5
REGIMENTS	0-7	1	1	1	1	1	1	1	1	1	1	1
LIKELIHOOD	0-7	2	2	2	2	2	2	2	7	7	7	7

UNIT NUMBER	1-127	53	54	55	56	57	58	59	60	61	62	63
UNIT I.D. (Full)	[9]	Gavin	Bargett	Lewis	Thoburn	Chamberl'	Nelson	Swinney	Lee	Smith	McLean	Cantwell
UNIT I.D. (Abbr)	[3]	7In	84P	11O	1WV	1WV	1RI	32O	55O	73O	75O	82O
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt
MAP LOCATION	(x,y)	26,14	26,14	26,14	26,14	16,19	26,14	6,0	6,0	6,0	6,0	6,0
CORPS	0-15	0	0	0	0	0	6	0	0	0	0	0
DIVISION	0-39	14	14	14	14	13	0	15	15	15	15	15
ARRIVAL	0-95	2	2	2	2	0	1	1	1	1	1	1
UNIT TYPE	0-3	0	0	0	0	2	2	0	0	0	0	0
OBJECTIVE	0-23	9	9	9	9	0	9	2	2	2	2	2
SMALL ARMS	0-31	1	1	1	1	2	2	1	1	1	1	1
ARTILLERY	0-31	11	15	15	15	12	0	12	12	11	12	12
TROOP STREN.	0-31	9	6	7	9	5	6	11	10	6	8	9
MOVEMENT	0-15	8	8	8	8	12	12	8	8	8	8	8
BATTERY STR.	0-15	2	2	2	2	2	0	2	3	2	2	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	6	3	1	2	3	1	2	3	5	6	1
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	5	5	5	5	5	4	5	5	5	4	4
REGIMENTS	0-7	1	1	1	1	1	1	1	1	1	1	1
LIKELIHOOD	0-7	7	7	7	7	7	2	7	7	7	7	7

UNIT NUMBER	1-127	64	65	66	67	68	69	70	71	72	73	74
UNIT I.D. (Full)	[9]	Owens	Thompson	Zeigler	Richards'	Trimble	Loeser	Wyndham	Jones	Lloyd	Conger	Wutshel
UNIT I.D. (Abbr)	[3]	2WV	3WV	5WV	25O	60O	8WV	1NJ	1Pa	60h	3WV	8NY
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt
MAP LOCATION	(x,y)	6,0	6,0	6,0	6,0	6,0	6,0	19,0	19,0	2,0	2,0	10,0
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	16	16	16	16	17	17	18	18	0	0	19
ARRIVAL	0-95	2	2	2	2	3	3	5	5	4	4	2
UNIT TYPE	0-3	0	0	0	0	0	0	2	2	2	2	0
OBJECTIVE	0-23	12	12	12	12	12	12	6	6	1	1	5
SMALL ARMS	0-31	1	1	1	1	1	1	1	1	3	3	1
ARTILLERY	0-31	12	11	12	12	16	16	12	12	11	11	15
TROOP STREN.	0-31	11	12	10	10	8	9	12	12	7	8	10
MOVEMENT	0-15	8	8	8	8	8	8	12	12	12	12	8
BATTERY STR.	0-15	3	3	3	3	2	2	2	2	1	1	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	6	4	4	1	5	6	1	1	0	3	1
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	5	5	5	4	5	5	4	4	3	3	3
REGIMENTS	0-7	1	1	1	1	1	1	1	1	1	1	1
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

CROSS KEYS - Regiments (Cont.)

UNIT NUMBER	1-127	75	76	77	78	79	80	81	82	83	84	85
UNIT I.D. (Full)	[9]	Meinke	von Gilsa	Amsberg	Buschbeck	Soest	Schiller	Muhleck	Kozlay	Krzyzan'	Hamm	Mahler
UNIT I.D. (Abbr)	[3]	39N	41N	45N	27P	29N	68N	73P	54N	58N	74P	75P
UNIT SIZE	[3]	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt	Rgt
MAP LOCATION	(x,y)	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	19	19	19	19	20	20	20	21	21	21	21
ARRIVAL	0-95	2	2	2	2	3	3	3	4	4	4	4
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	5	5	5	5	5	5	5	5	5	5	5
SMALL ARMS	0-31	1	1	1	1	1	1	1	1	1	1	1
ARTILLERY	0-31	13	15	15	15	15	13	15	13	15	15	15
TROOP STREN.	0-31	9	10	11	11	10	9	10	8	10	8	7
MOVEMENT	0-15	8	8	8	8	8	8	8	8	8	8	8
BATTERY STR.	0-15	2	2	2	2	2	2	2	2	2	2	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	4	2	4	1	0	4	1	3	0	2	5
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	3	3	3	3	2	2	2	2	2	2	2
REGIMENTS	0-7	1	1	1	1	1	1	1	1	1	1	1
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

CROSS KEYS - Brigades (Divisions)

DIV. NUMBER	1-39	1	2	3	4	5	6	7	11	12	13	14
DIVISION I.D.	[9]	Winder	Taliafer'	Patton	Taylor	Trimble	Elzey	Steuart	Kimball	Ferry	Tyler	Carroll
CORPS	0-15	0	0	0	0	1	1	1	6	6	6	6
TYPE	0-1	0	0	0	0	0	0	0	0	0	0	0
ORDERS	0-2	1	1	2	2	1	1	1	0	0	1	1
OBJECTIVE #1	0-23	9	9	0	0	12	12	2	9	9	9	9
OBJECTIVE #2	0-23	0	0	0	0	0	0	0	10	10	0	0
LEADERSHIP	0-7	5	5	2	5	5	3	4	7	3	4	5
STAFF	0-7	5	4	4	5	4	4	4	5	4	4	4

DIV. NUMBER	1-39	15	16	17	18	19	20	21
DIVISION I.D.	[9]	Schenk	Milroy	Clusaret	Bayard	Stahel	Koltes	Bohlen
CORPS	0-15	5	5	5	5	0	0	0
TYPE	0-1	0	0	0	1	0	0	0
ORDERS	0-2	0	0	0	0	0	0	0
OBJECTIVE #1	0-23	2	12	6	6	5	5	5
OBJECTIVE #2	0-23	1	1	1	1	1	1	1
LEADERSHIP	0-7	5	4	2	2	3	1	3
STAFF	0-7	3	3	3	3	2	2	2

siderable strategic talent, his tactical handling of the Battle of Port Republic revealed his weaknesses. 'Battle-lust' clouded his judgement whenever he got too near the sharp end. He'd get a glow in his eyes and go peculiar; his men called him 'Ole Blue Light'.

CROSS KEYS - Divisions (Corps)

CORPS NUM.	1-39	1	5	6
CORPS I.D.	[9]	Ewell	Blenker	Shields
MAP LOCATION	(x,y)	8,11	10,0	26,15
TYPE	0-1	0	0	0
ARRIVAL	0-95	0	1	1
ORDER	0-2	1	0	0
OBJECTIVE #1	0-23	9	5	9
OBJECTIVE #2	0-23	0	1	1
MOVEMENT	0-15	12	9	9
DAILY COMM.	0-15	1	0	3
LEADERSHIP	0-7	6	2	2
STAFF	0-7	5	2	3
STRENGTH	0-7	1	1	1
LIKELIHOOD	0-7	7	7	2

may have gone badly for the South. Indeed, had Shields and the other two brigades of his division been close enough to make an appearance, all may have been lost. Jackson's eagerness for the taste of battle had got him into trouble again, just as it had at Kernstown. If the destruction of Banks' army had show-cased Jackson's con-

The Federals withdrew in relatively good order and the belated appearance of Frémont's guns on the far bank of the Shenandoah put paid to an effective pursuit. That night Jackson withdrew through Brown's Gap in the Blue Ridge Mountains.

The campaign was over. Within days Frémont, Shields and McDowell would get their orders to leave the Valley. What had begun on May 8th as an inconclusive skirmish at McDowell had ended, one month later, a resounding triumph for the Confederacy. Never again in this war would so small

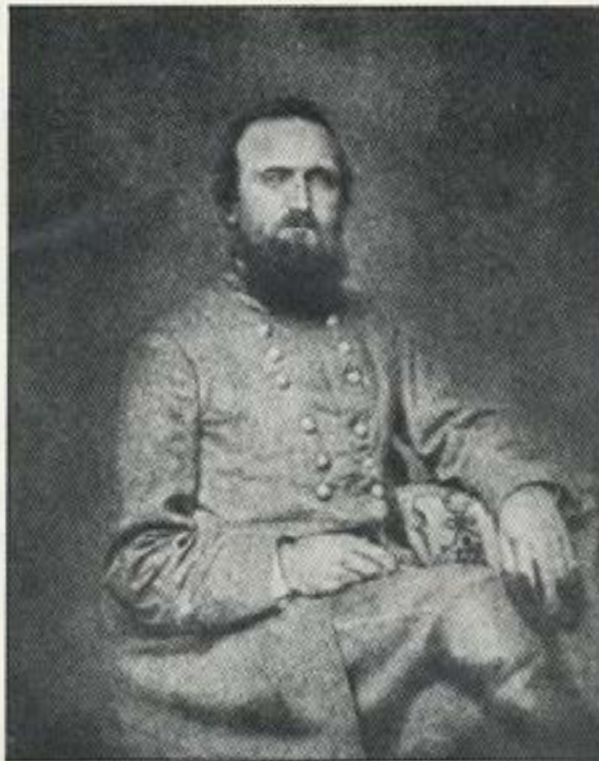
a force conduct itself so successfully, and achieve so much, against such an overwhelming opponent.

CREATING THE SCENARIO

If this is the first time you have tried to transfer a magazine scenario onto a save-game disk (or hard disk), we recommend you follow these directions. The letters in parentheses after each heading refer to the corresponding section in the Decisive Battles manual.

There is some additional information for IBM users at the end of this section. Be sure to read it, especially if you have an EGA/VGA card and want to take advantage of our "full map" graphics.

Macintosh users should note there are some changes to the numbering system in their design manual and that access to the various design routines is obtained through conventional, pull-down Mac menus.



Thomas 'Stonewall' Jackson
His exploits in the Shenandoah were never equalled

Preparing the Disk [3]. Boot up the Master Disk and select <CREATE> from Menu H. Select <SCENARIO> from Menu B. <LOAD> any historical scenario. You have been processed through to Menu J. Select the <DISK> line from that menu.

If you have one disk drive, remove the Master Disk and replace it with a blank disk. If you have two drives, remove the Scenario Disk from the second drive and replace it with a blank disk.

Select <FORMAT> from the on-screen menu. Once this is done, select <SAVE> from the menu and store any of the historical scenarios in any unused save-game location. This procedure prepares the template on which we will build the *Cross Keys/Port Republic* scenario.

Hard disk users should note that all they need is enough room on their hard disk to hold the new scenario. Macintosh users should note that they do not need to use an existing scenario as the template. They can select *New* from the File Menu.

The WarPlan™ menus are displayed on the back of the game menus card. Refer to this when necessary. Macintosh users should check their WarPlan™ manual for the location of the different design routines.

Title [5c]. There are three lines of text for the title:

Cross Keys

Jackson in the Shenandoah
June 8th - 9th, 1862

Go back to Menu J and re-save the game in the same location.

Map Size [5a(i)]. The top left sector is 0. The bottom right sector is 8. Macintosh dimensions are 27 x 27.

Define Terrain [5a(ii)]. The accompanying Terrain Effects Chart lists the details of the active terrain types for this scenario. Select (or paint) the icons of your choice to represent the ten terrain types.

Create Map [5a(iii)]. Select the <CLEAR> line from Menu J. Clear the map and the data. Use the accompanying map to build up the screen map. Do not forget to assign control to each hex. Confederate forces initially control all



The Cross Keys Battlefield

Looking south. The hamlet of Cross Keys is in the background

CROSS KEYS - Objectives

OBJ. NUMBER	1-23	1	2	3	4	5	6	7	8	9	10	11	12
OBJ. NAME	[11]	Port Repub'	Cross Keys	Montvideo	Brown House	Goods Mill	Schoolhouse	Hull House	Pirkey's Fd	Lewis House	Lower Ford	Browns Gap	The Church
MAP LOCATION	(x,y)	9,20	2,6	19,0	25,4	12,8	10,13	3,25	6,16	20,16	10,21	17,26	8,11
START (N)	1-95	1	1	1	1	1	1	1	1	1	1	1	1
STOP (N)	1-95	23	23	23	23	23	23	23	23	23	23	23	23
VPs/TURN (N)	0-255	20	5	0	0	5	10	20	5	5	10	30	5
VPs AT END (N)	0-255	100	25	5	5	25	50	100	50	50	50	100	25
MANEUVER (N)	0-15	15	8	0	0	6	10	0	5	6	10	0	5
START (S)	1-95	1	1	1	1	1	1	1	1	1	1	1	1
STOP (S)	1-95	23	23	23	23	23	23	23	23	23	23	23	23
VPs/TURN (S)	0-255	1	1	0	0	1	1	0	1	2	1	0	1
VPs AT END (S)	0-255	25	10	25	5	10	10	5	10	25	5	5	25
MANEUVER (S)	0-15	15	4	0	0	2	7	0	3	6	10	0	0

CROSS KEYS - Terrain Effects Chart

TERRAIN #	0-31	0	1	2	3	4	5	6	7	8	9
TERRAIN NAME	[11]	River	Ford	Farmland	Woods	Dense Woods	Rough	Town	Hamlet	Church	School
SIGHTING VAL.	0-7	0	0	2	10	15	5	10	3	3	3
MOVEMENT	0-7	0	7	2	6	7	4	1	2	2	2
COVER VALUE	0-7	0	0	1	4	7	3	4	2	2	2
FORT VAL. (N)	0-7	0	0	0	0	0	0	0	0	0	0
FORT VAL. (S)	0-7	0	0	0	0	0	0	0	0	0	0

CROSS KEYS - Artillery

ARTILLERY #	1-31	11	12	13	14	15	16	17
ARTILLERY I.D.	[11]	6pd S'bore	12lb How	12lb S'bore	3" Rifle	10lb Parrot	20lb Parrot	6lb Rifle
RANGE	0-5	4	5	5	5	5	5	5
RATE OF FIRE	0-7	4	4	3	4	5	3	5
EFFECT'NESS	0-7	2	3	6	4	3	6	2
PENETRATION	0-7	1	2	2	4	4	7	4

The objectives assigned to the Army HQs will not appear on the screen until after the objective data base has been entered.

The North has 2 corps. The South has 1 corps. Consult the Corps Table and enter the data as shown.

CROSS KEYS - Small Arms

SMALL ARMS #	1-31	1	2	3
SM. ARMS I.D.	[11]	Rifle Mus	Carbine	Mxd SAs
RANGE	0-1	1	1	1
FIRE VALUE	0-7	6	4	2
MELEE VALUE	0-7	6	4	4

hexes on the map except for a small area around the Lewis House south of the Shenandoah River.

CROSS KEYS - Armies

SIDE	N/S	UNION	REBELS
COMMANDER	[9]	Frémont	Jackson
SECOND I.C.	[9]	-	-
ARMY I.D.	[11]	Frémont's Command	Army of the Shenandoah
MAP LOCATION	(x,y)	6,0	9,19
ARRIVAL	0-95	2	0
OFF. OBJ. #1	0-23	2	5
OFF. OBJ. #2	0-23	1	9
DEF. OBJ. #1	0-23	2	1
DEF. OBJ. #2	0-23	5	10
MOVEMENT	0-15	8	12
STAFF	0-7	2	5
STRENGTH	0-7	1	1
LEADERSHIP	0-7	2	7

Save the game again. How often you save really depends on how lucky you feel. After several major disasters, I choose to save after each section is completed.

Limits [5b(i)]. Before you can enter the military units for each side, you must set the force limits. The force limits are as follows; corps (5), divisions (11), brigades (41). Apple II and C64 users must also set the artillery weapon limit to 11.

Weapons [5b(ii)]. Consult the Small Arms and Artillery Tables and enter the data as shown.

Forces [5b(iii)]. Edit the North (Union) Army HQ and the South (Rebel) Army HQ as shown in the data tables.

The North has 11 divisions. The South has 7 divisions. Consult the Divisions Table and enter the data as shown.

The North has 46 brigades. The South has 32 brigades. Consult the Brigades Tables and enter the data as shown.

Objectives [5b(iv)]. There are 12 objectives. Consult the Objectives Table and enter the data as shown.

Scenario Setup [5d(i)]. Enter the following data. Date (8), Month (6), Year (62), Century (18), North Maximum Hex Movement is (4,0,6,0,6), South Maximum Hex Movement is (5,0,7,0,7), neither side is encamped or entrenched (the latter introduced only in Volume II), and VP awards are 255 per leader, 3 per 100 men (North) and 2 per 100 men (South). IBM and Macintosh users should note the combat value for this scenario is 3 for north and south.

Scenario Details [5d(ii)]. This is a two day scenario. Enter the following data

for Day 1. The weather is Clear (0), the North is Offensive (1) and the South is Offensive (1), 8 am to 7 pm are day (3), move (1) turns and 8 pm is a dusk (2), move (1) turn. Enter the following data for Day 2. The weather is Clear (0), the North is Defensive (0) and the South is Offensive (1), 6 am is a dawn (1), move (1) turn, 7 am to 2 pm are day (3), move (1) turns and 3 pm is a day (3), END (2) turn.

Finally, save again and the scenario is ready to play.

NOTES FOR IBM USERS

IBM users with CGA, MCGA, Tandy or Hercules graphics can create the scenario using the advice given above. There is a minor change in the weapons data base. You do not have to set limits for weapons. There is space for 31 weapons of each type.

IBM users with EGA or VGA cards must first create the game map with the "full-map" graphics disabled. To do this, run the program as DB2 f (or DB3 f or DB1 f) which will by-pass the "full-map" graphics. Select a scenario as a template as explained above and save it in a save-game location. Build up the map in the usual way and save when finished. The rest of the data for the scenario may be entered with the "full-map" graphics either disabled or enabled. There is a full explanation of "Full Map" graphics in Issue 14.

Re-boot the program (this time with the "full-map" graphics enabled) and use the "full-map" WarPaint™ tool to build up the map. In other words, the "full-map" graphics are only graphic images and do not affect the play of the game.

A NOTE ON .LBM FILES

The .lbm files contain the graphic images. DPaint2™ from Electronic Arts can be used to manipulate the file. Up to 250 hexes can be created but DPaint2™ must be used to change the size of the .lbm file. To do this, use the 'Page Size' function to alter the height of the file.

The Decisive Battles program reads the size of the .lbm file on loading and adjusts the WarPaint™ values automatically. If you don't want to worry about manipulating .lbm files, choose a scenario with a 250-hex .lbm file as the template to build the new scenario on. When saving an .lbm file, a temporary file is created first. When the temporary file is successfully saved the original is deleted and the temporary file renamed. This means there must be enough space on the current disk to hold the temporary file.

Macintosh users will find no such complications when it comes to creating scenarios. Follow the directions given in the design section of any *Decisive Battles* game manual.

VARIANTS

(1). There was every chance that all four of Shields' brigades could have reached Port Republic in time to take part in the battle. These additional forces are already in the data base and a simple change to the likelihood values for them will bring them into play at a useful time. Change the likelihood value for Shields' HQ to 5 and the likelihood values for all regiments in Kimball's and Ferry's brigades to 5. Change the likelihood value of Nelson's cavalry regiment to 5.

(2). Heavy rain over the previous two days had swollen the rivers and creeks to record levels, washing out many of the fords. Principal among these was the Upper Ford, just north of the Lewis House. An additional crossing point on the Shenandoah would have been very interesting. Change the terrain type of hex 17,14 to T1 (i.e. a ford) and add an additional objective (#13) to the data base. The details are (Upper Ford), (17,14), (1), (23), (3), (20), (10), (1), (23), (1), (10), (6).

PLAYER'S NOTES

Federal. There is no need for you to emulate the timorousness of John Frémont. The more pressure you can

put on the Rebs at Cross Keys, the fewer men Jackson will be able to spare to take on Shields. Admittedly, some of your brigades are a bit green but there are plenty of them so you will always have some fresh men to commit to the fight. If the Rebs send only one or two brigades to take on Shields, you can attack them as well. However, reserves here are scarce and unless you get lucky with the appearance of Shields himself, you could have your work cut out keeping the enemy at bay.

Confederate. Who do you want to crush first? Frémont's men are the easiest to beat and you can be certain they won't be reinforced. Unfortunately, if Shields himself turns up while you're doing this, then the fight will get very tough south of the Shenandoah and you may wind up losing Port Republic; and the game! The open terrain south of the river will make deployment a little easier there, and artillery more effective. ♦

LETTERS... (from p. 4)

brought home a loaner NEC from work and purchased your *Decisive Battles of the American Civil War: Vol One* to satisfy my desire to game with an SSG wargame.

While I do like the game, it would have been real helpful if a tutorial for WarPaint had been included walking you through step by step using both a a virgin scenario as well as one to modify one of the existing scenarios.

The only other wish I have gamewise for the Civil War series is that it be designed for the 16 bit computer instead of the old 8 bit. Perhaps then the subordinate AI routines would prove more challenging by allowing units with more competent commanders to coordinate attacks with multiple units instead of what seems to happen too often, namely singular units getting butchered.

Continued on p. 20

DESIGN NOTES FOR CARRIERS AT WAR

by Gregor Whiley

It looks like we will be releasing Carriers at War in time to celebrate the 50th Anniversary of the Battle of the Coral Sea. If we don't make that, there's always Midway... or Solomons... or Santa Cruz...

Whatever, we guarantee it will be published before the 50th anniversary of the Great Marianas Turkey Shoot!

Carriers at War is a game of fleet carrier battles in the Pacific 1941-45. SSG released the original 8 bit version in 1984, to a wildly enthusiastic reception. Now it's time for a 16 bit version.

Carrier operations are inherently tense, uncertain and dangerous affairs, and the 8 bit version conveyed that excitement very well. That meant that we didn't have to change what the game was about, but we welcomed the chance to do it again, and do it even better.

The first action was to discard all the original code. The new CAW is not really a conversion. It's a brand new game that uses the same subject and philosophy as the original. We wanted to take a very detailed approach to elements that were decided at a much higher level in the original game. Rather than accepting compromises that were forced on the 8 bit version, we decided to start from scratch. Those of you who have played the original game will appreciate just how far-reaching the changes have been.

Ships

Ships are still created as ship classes, with individual data for each ship. Each ship class now has an individual picture, which is used in various parts of the game, and can be called up at any time. The system now supplies complete technical information on each ship, plus a note on its historical fate. Ships now have a much more dynamic damage system. Bomb or torpedo hits

cause permanent damage and can also start fires. Over time, fires can spread, and also cause further damage. Damage control crews attempt to extinguish the fires, although they cannot remove permanent damage. Any damage or fires on a ship will be shown on the ship's status picture.

A ship with good damage control could suffer quite a lot of fire damage but eventually be put more or less right. A ship with poor damage control could suffer only a few hits, but turn into an uncontrollable wreck.

Ships are also rated for vulnerability. Conceptually, a carrier is a large, essentially unarmoured, avgas and ammunition store with a nice flat deck for catching bombs. CAW won't let you forget this fact.

Planes

Each plane in CAW is now tracked in great detail. As well as the normal statistics for each plane type, each individual plane has its own pilot who is rated as Ace, Veteran, Trained or Green. The fate or location of each plane is also known at all times. Every plane type has its own illustration as well as full technical details.

A squadron report can tell you exactly how many planes you have, their damage status, and the experience of each pilot. You can also see why any plane was lost e.g. lost on take-off, damaged by flak, shot down by CAP and so on.

All combat is resolved on an individual

plane basis, and up to 2048 planes can be simulated.

Surface Combat

The new surface combat routines are quite sophisticated. If surface combat is possible, ships are automatically sorted by type. Capital ships (BB, BC and CA) are placed in a battle line. Light ships (DD and CL) are divided between screening formations ahead and behind the battle line. Carriers, transports and anything else are placed behind the battle line, in a protected position.

You can order formations to open or close the range, and nominate targets for each weapon type in range. Light ships may want to close the range to employ torpedoes, while capital ships will probably wish to keep the combat at battleship gun range. Special rules will apply for combat at night, where the opening ranges in a battle will normally be much shorter than in daylight.

Combat occurs in a series of five minute rounds.

We wanted to bring some tactical decision making to surface combat, even though it won't occur all that often. We also felt that anyone who fought a surface group to within gun range of a carrier task force deserved some reward for their enterprise.

Searching/Sighting

This is one of the most critical areas of CAW. For each search sector you have chosen, the system maintains a search plane on an outward search leg. If a plane sights something, then it automatically shadows the sighting, and a new plane is launched. At any time you can call up a reports showing all your current sightings or the exact location and status of all of your search planes. False reports, and misreporting of sightings were simply a fact of life, and the system is designed to reproduce these conditions. It's up to you to sort out what is happening, and make crucial decisions... like launching a strike!

Air/Naval Combat

If you have a sighting, you can launch a strike. The system helps you organise this, and shows you important information like range, time to target and expected recovery time for the strike.

Once launched, a strike must locate the target for itself before it can attack. Strikes will do their own searching if the target isn't where they think it should be. Escort fighters will attempt to engage any CAP, while the bombers run the gauntlet of CAP and light and heavy AA. Even if attacking bombers are not damaged, they can be harassed into a less accurate bombing run. These routines will produce a very accurate simulation of air/naval combat.

Combat Reporting

Choosing the full combat reporting option delivers a blow by blow account of combat. A detailed graphic display shows the fate of each plane as it makes its attack run, and whether its ordnance hits or misses. Hits are shown by animated explosions on the ship, as are any fires or damage caused. This makes the combat sequence very exciting, as you follow the inevitable attrition on your aircraft, and await the result of each bomb drop or torpedo run. Purists can turn this option off, and rely on the far less informative and less accurate after action reports.

Game Control

Carriers at War was designed from the ground up to be mouse controlled, although there is a keyboard option. The system is structured so that it is easy to move laterally, giving the same order to different groups, without having to move up and down menu hierarchies.

Graphics

We have concentrated very strongly on the visual appearance of the game. On the IBM, we have used a hi-res VGA mode with a variable palette of 16 out of 262,144 colours. EGA users are stuck with their fixed 16 color palette. Having a variable palette greatly enhances

the visual effect we were able to achieve.

Scenario Editor

With CAW, we have decided to make the scenario editor a separate item for reasons of price, quality and time. To bundle all the editor material in with the already huge size of the main game would push the price to unacceptable levels. It would also further delay the release of an already long-awaited game. Produced as a separate item, a scenario editor can be a polished and professional piece of work, which only those people who really want it have to pay for. The editor itself will be a fairly massive undertaking, as an explanation of just one section of it will show.

WarRoom™

The main reason for CAW taking as long as it has is the work we have put into the brand new WarRoom™ module. WarRoom™ is the ultimate AI system for wargames, and is the culmination of all of SSG's experience in AI systems for strategy games.

Instead of trying to hard-wire a series of rules for computer players that will be valid for all scenarios, WarRoom™ takes that decision making and gives it all to the scenario creator. Now each scenario comes with a series of specially crafted, infinitely flexible plans for the computer player.

The problem with most AI schemes is that they produce a predictable response by the computer player. After a few games, players know what to expect. WarRoom™ solves this problem



completely. A few examples from the Coral Sea scenario will illustrate what can happen.

The transport fleet invading Port Moresby used to sail a fixed route at a known time. Now we can simply delay its start time by a few days. Or it could take a zigzag path through the Solomon Sea. The Japanese carriers used to sail more or less straight for the middle of the Coral Sea. Now, they could precede the transport group, or escort it closely, or make a high speed dash for the Louisiade Archipelago. US admirals who simply turn up off the end of New Guinea on day three could be in for a very nasty surprise.

It is hard to describe the vast range of options WarRoom™ affords to us as scenario designers. Task Forces (TFs) can be ordered to proceed in an innocuous direction at a leisurely pace for the benefit of search planes during the day, then turn around for a high speed run during the night. Each TF action can have a probability assigned to it, so that the fact that a player has observed actions A and B does not allow him to

LETTERS... (from p. 17)

infer that action C will follow. The creator can set, and change at any time, all the decision making processes of a TF. These include where to search, what CAP to fly, what sort of targets to strike and which to ignore, special areas for attention, no go zones, speeds and basic TF missions.

The basis of WarRoom™ is the selection of a series of cards by the computer. Each card contains actions that the scenario creator has programmed for a particular TF. The idea behind the cards is that the scenario creator can make a coherent plan and doctrine for each TF in the scenario, much like a human player would.

This plan is not just a simple sequence of activities. Each card can contain a probability of being chosen which allows a great deal of flexibility. A TF at some pivotal point in the scenario could be allowed a choice between three or four different cards.

These could each be start of planned sequences, which could themselves contain further variation. The system also allows for the creator to regain the attention of a TF and redirect it's activities if it has lost its way due to the heat of battle.

The result of a well constructed WarRoom™ set will be to give the computer a real fighting plan for the battle, while forcing the human player to make decisions based on current information, not prior knowledge of how the computer plays.

These are exactly the sort of decisions a real admiral had to make. So much so that now, when you play CAW, you won't just be playing against the computer, you'll be playing against us. We look forward to kicking your butt! ♦

Don't forget! Owners of the original AII/C64 version can upgrade to an IBM version for half the RRP. It's the best deal in town!

I know this happened during the Civil War, but so did the opposite. Perhaps too, small arms range could be factored as well to show the differences instead of just 0 or 1. I feel the graphics are more than adequate for wargaming.

I know you mentioned VGA being used for your latest 16 bit products, but I really hope you devote as much time and effort to the computer opponent (AI) as you've done to graphics because as in computerised chess, a realistic computer opponent gives the game substance and depth and always brings you back for one more go.

Just look at some of the programs that have been published over the last few years where the computer opponent is predictable and unrealistic, where are these programs now? Collecting dust on the shelf. I don't want to see that happen to SSG's latest.

One thing I have noticed in all SSG games lately is the lack of copy protection. While this step is commendable, I feel it should be done strictly on a computer by computer basis. I recently was asked to attend a gamers meeting which was a spin-off of our users group meeting here in Melbourne/Palm Bay. I have to admit I was quite shocked to see the amount of piracy that was going on. While most of the pirated software could not be played because of a lack of documentation, SSG's *Gold of the Americas* could.

I liked what I saw and purchased the game through Software City in Melbourne. But what bothered me is you guys are leaving yourselves wide open to this sort of thing. I will admit I don't care for copy protection, but feel it is necessary, particularly in the case of computers such as the Amiga and Atari ST which do not have the user base of the IBM or Mac. If your sales are not spectacular on these computers, the try the user manual system of copy protection such as Panther Games has done. From what I saw at our meeting, it would make a big difference.

I hope you continue to support the Amiga. I know it is a hard machine to program, but I'm sure the rewards will be worth it. There is supposed to be a fresh new breeze at Commodore. I can only hope you find this so by getting the support you need. In closing, I hope the fresh breeze blowing through Commodore makes it as far as Australia and takes you Amiga sales skyward.

Respectfully yours,
Roger F. Batchelder, II
Palm Bay, FL
USA

Sir,

I just recently purchased *Panzer Battles* and it is an excellent game. I understand that *Panzer Battles* and *Halls of Montezuma* are adaptations from old 64K games. A game, designed from conception, to take advantage of the faster speeds and larger memories available in computers today would be truly impressive. Is there such a game in the works?

The reason I am writing is to provide feedback on your game. I hope your are interested. I won a Mac, so obviously I have been playing that version of the game. I really like the feel of the game. Particularly the ease with which I can view the battlefield and give orders. I feel it is one of the most accurate computer simulations I have played.

I have several suggestions. I have played for many years, and I have an intense interest in seeing better and better games on the market; including computer games. Your game is fantastic, yet I still have some ideas that would improve the game, for me at least since I can't speak for anyone else. Please accept my suggestions in the spirit intended.

The first suggestion is that I would like to be able to point to terrain features and tell the regiment to move there and

Continued on p. 48

FALL OF MALAYA

A Very British Catastrophe

December 1941 - February 1942

A Campaign Scenario for the Battlefront Game System

by Ian Trout

It's coming up to the fiftieth anniversary of this inglorious episode in British military history and, in common with most of Britain's major disasters in the Second World War, we are still waiting for an honest examination, and explanation, of the events which happened there. The official history paints a picture of an overwhelming Japanese army, enjoying complete air and naval supremacy, crushing a valiant but scattered and inadequately trained defending force.

A look behind the curtain reveals the facts to be otherwise. To paraphrase Winston Churchill's famous words; "Never... have so many with so much been beaten by so few with so little!"

What brought on the disaster? How could a 130,000 strong Commonwealth army be defeated by a 80,000 strong Japanese force? Who takes the blame? These questions form the basis for this article.

In addition, given Japanese naval superiority, could Malaya (or Singapore) have been held long enough for real relief to arrive? This is a much tougher question to answer; that's the nature of what-ifs. You can decide for yourself. This writer's opinion will become evident soon enough!

In October of 1940, a conference was convened in Singapore with representatives from England, Australia, New Zealand, The Netherlands and the United States attending. Its purpose

was to consider the defense of the Pacific area in general and the East Indies in particular. There was general agreement that an attack by Japan was inevitable although it was considered unlikely that the United States would be directly provoked. Hong Kong, Burma, Malaya (and Singapore), the Netherlands East Indies and certain islands in the Pacific were probable targets. Australia and New Zealand were too far away to be threatened, at least by the initial offensive.

Hong Kong was considered too isolated to be properly protected. Malaya was the key to the British position in the East Indies. A ground force of three division equivalents (26 infantry battalions, 14 field artillery batteries, 4 anti-tank batteries and a regiment of light tanks) was considered the minimum necessary to mount a successful defense, provided an air force of 560 modern types was to hand.

It was acknowledged that most of the equipment would have to come from Britain; neither Australia nor New Zealand had the industrial infrastructure to supply the requirements. India might provide the manpower but little else.

There was not much prospect that Britain could supply the aircraft. The Battle



*Lt-General A. E. Percival (left)
The architect of the Commonwealth disaster.
Maj-General H. Gordon Bennett looks
on bemused.*

READ THIS BEFORE YOU PLAY

The Campaign has been divided into two separate scenarios. The first covers the invasion of the Malayan Peninsula and ends with the retreat of the Commonwealth forces into Singapore. It took the Japanese Army about 50 days to achieve this result and that's twice as long as the maximum time frame allowed with the *Battlefront* game mechanics. So we've tinkered with the system a bit. Here's what we've done.

Instead of the usual four turns per day, each turn in the Fall of Malaya scenario represents one day. Every fourth day (the night turn) can be viewed as a rest day; i.e. troops can't be expected to fight on without some sort of respite unless the circumstances are desperate. Ground scale, unit strengths and terrain effects have all been adjusted to take account of the revised time scale. Furthermore, to reflect the uncontested air support enjoyed by the Japanese for most of the campaign, there are three stationary artillery units deployed in the South China Sea. They can't be attacked directly and the support they provide should be viewed as additional air power.

The second scenario covers the final humiliation of the Commonwealth Army on the Island of Singapore at the standard *Battlefront* unit, time and ground scale. Note that no ground movement is allowed on the mainland in this scenario. Many of the coastal hexes in Johore State have been designated as impassable to prevent a wayward Japanese unit from invading in the wrong direction! The lone ground unit on the mainland is a stationary heavy artillery unit which appears about turn 12 to provide supporting fire for the Guards infantry division.

You can play the scenarios separately or as a full campaign. To play the full cam-

paign, finish the Fall of Malaya scenario and then save the game. Go into the creation kit and record the following information from the final turn status in the Fall of Malaya scenario.

(1). Add up the surviving strength points of all units in the four infantry brigades of 3rd Corps (C'wealth); note that it is quite possible that this total will be zero.

(2). Add up the surviving strength points of all units in the two infantry brigades of the 8th Australian Division; again, this total may be zero.

(3). There are four artillery units in the Commonwealth order of battle. Write down how many of them survived (it doesn't matter how battered they are).

(4). Write down the number of objectives in Allied hands at the end of the scenario.

(5). Write down the total strength losses for the Japanese Army.

This is all the information you will need from the Fall of Malaya scenario. Load in the Singapore scenario and save it in your save game file. Make the following changes to the data in the save game file.

(1). For every surviving strength point in the British 3rd Corps, add 2 strength points to any battalion in a British or Indian brigade. (Western - 44In; Northern - 28th, 53rd; Southern - 12th, 6/15, 8th). For example, if there were 10 surviving infantry strength points from the brigades in 3rd Corps, up to 20 strength points could be added to any of the infantry battalions in the above brigades. Note that no battalion can exceed its maximum size value. In the very unlikely event that you have more points to assign than there are battalions to assign them to, the excess may be taken as increases in battalion experience; i.e. for every two strength points not taken as reinforcements, add one to the experience rat-

ing of an infantry battalion in any of the above brigades.

(2). For every surviving strength point in the 8th Australian division, add 2 strength points to any infantry battalion in the 22nd or 27th Australian brigades. The restrictions are the same as in (1) above.

(3). Each surviving artillery unit from the Fall of Malaya scenario allows the creation of two additional field artillery units. Their specifications are identical to the data describing the 2/15 Field Artillery regiment from the Western Force. They must be assigned to one of these brigades - 22nd/Western, 27th/Western, 44In/Western, 28th/Northern, 12th/Southern, 6/15/Southern or 8th/Southern. They can be deployed anywhere (on Singapore).

(4). For every three objectives, or part thereof, in Allied hands at the end of the Fall of Malaya scenario, increase the admin rating of any one Allied Corps sized formation; i.e. the Western, Northern or Southern. In addition, increase the admin of all HQs subordinate to that formation by 1. For every objective in Allied hands, increase the leadership value of any one Allied brigade by 1. Finally, if five or more objectives were held, add 10 ground support points to the Allied total and increase its effectiveness by 2.

(5). For every 4 strength points lost by the Japanese in the Fall of Malaya scenario, add 1 to the victory points awarded to the Allies for killing Axis non-mech strength points in the Singapore scenario.

The Commonwealth player doesn't have to do very much better than the historical outcome in the Fall of Malaya scenario to cause the Japanese player a lot of grief in the Singapore scenario.

of Britain still raged and what little could be spared from Britain's home defense was despatched to the Middle East. Nowhere in the plans for the defense of Malaya is it specified where these aircraft were to come from and, more importantly, what could (and should) be done without them.

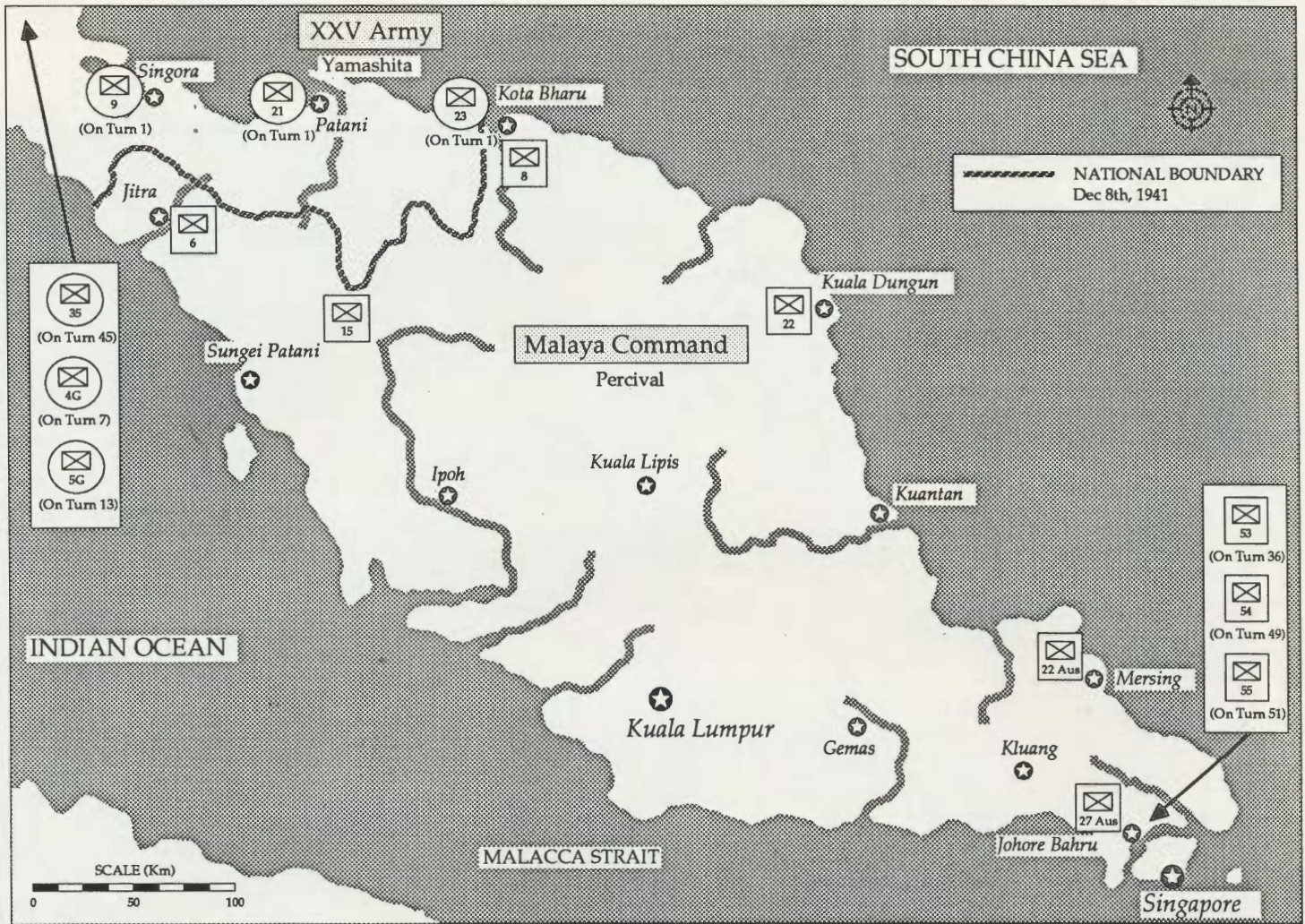
Right up to the Japanese invasion in December 1941, Malaya Command never had a plan for defending itself

with what it actually had. All the plans were drawn up on the expectation that the needed reinforcements would arrive in time to be employed.

The squeaky wheel gets the oil and the most perfunctory study of military history will surely tell you that reinforcements go to active theatres. In 1941, Britain went from crisis to crisis; the debacle in Greece and Crete, the German invasion of Russia and the

resurgence of Axis fortunes in the Middle East. There was never a time when there was the slightest likelihood that the air reinforcements needed for Malaya would be forthcoming. Did Malaya Command not read the newspapers! But we're getting ahead of the story; we'll get onto the full significance of British military incompetence a little later.

The reliance on the arrival of a British



Situation Map for the Fall of Malaya Scenario

naval squadron to see off Japanese sea power showed the same unwillingness to face reality. Surely the Japanese would launch their offensive at the precise moment when Britain would have the greatest difficulty in finding a fleet for the Far East. Again, no provision was made for conducting a defense on the basis of an indefinite delay in the appearance of the Royal Navy. That the Royal Navy, no matter how large a contingent was sent, may not have been equal to the task is another matter.

In the event, we get down to the following. The ground defense plans called for the following deployments. A division on the Thai border held in readiness to pre-empt any Japanese move down the peninsula or an invasion of Southern Thai ports. A second division held in reserve in Johore and Singapore to guard against an end run. A third division, split up to defend the newly built airstrips on the east coast. A further two brigades made up the theatre reserve.

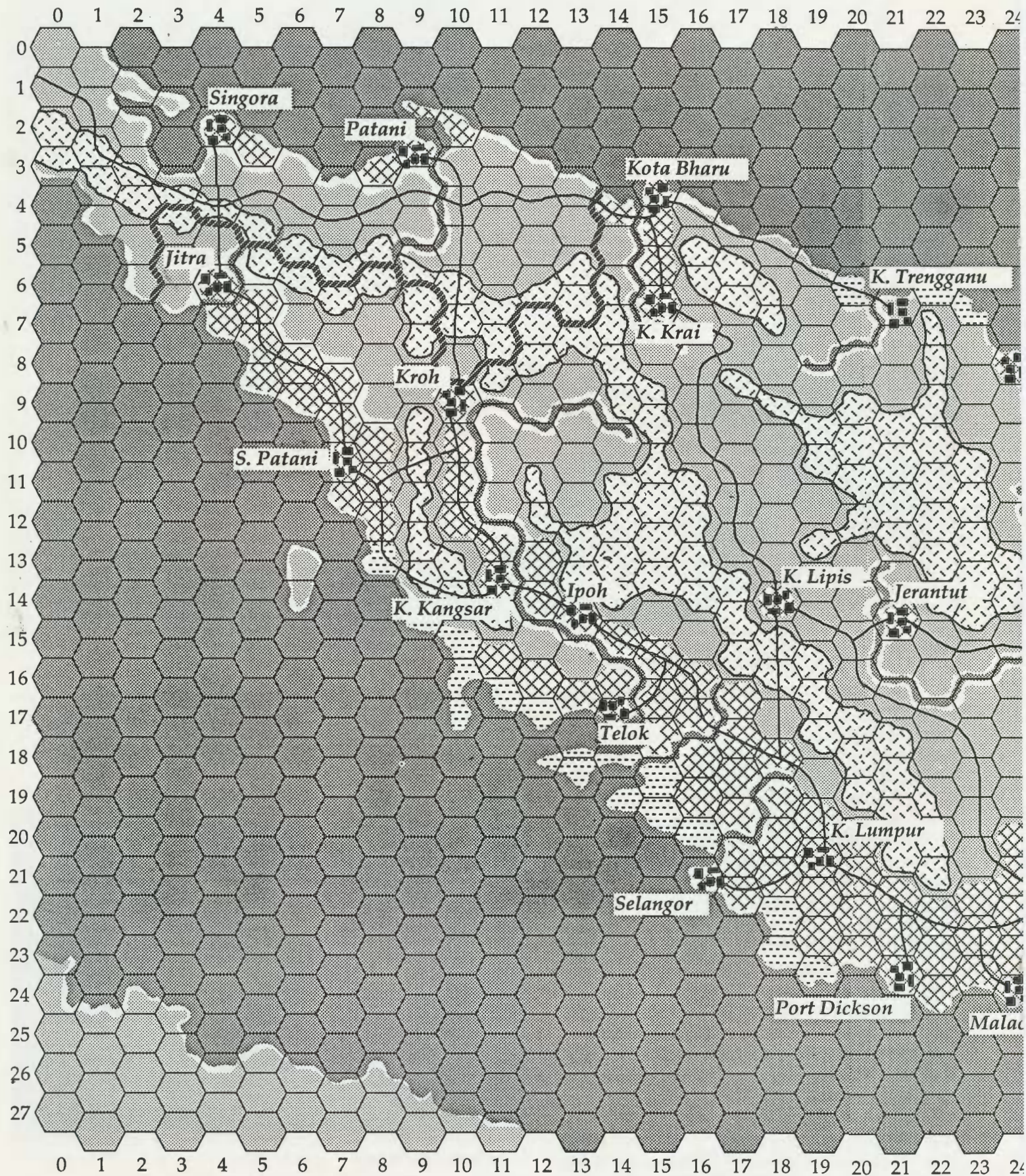
What of the troops themselves? There were two Indian divisions, the 9th and the 11th, the 8th Australian division and a collection of local state militia and the Singapore garrison. The official histories,

both British and Australian, contain far too many veiled accusations against the Indian and native troops, repeatedly referring to their lack of training and enthusiasm; all this with never a hint of criticism for their predominantly British leadership.



*South of Malacca
Australian anti-tank gunners at work*

MALAYA - Map





Terrain Key

	OCEAN
	PLANTATION/ FARMLAND
	SWAMP
	JUNGLE
	ROUGH
	MOUNTAINS
	TOWN/CITY
	AIRBASE*
	BRIDGE
	RIVER
	NATIONAL BOUNDARY
	FORT
	AIRFIELD
	PROHIBITED**

*** See the special terrain notes in the section on Creating the Scenario



Sappers at Work

Another bridge being prepared for demolition

Somehow the impression has been created that the Japanese soldier, through some peculiarly oriental talent, was the master of jungle warfare while Commonwealth troops, and Indian soldiers in particular, were not suited for this kind of fighting. The two Indian divisions had been stationed in Malaya for twelve months or more. Why were they so ill-prepared for the impending struggle?

In the two years from the onset of war with Germany until the start of hostilities with Japan, only one training school was set up in Malaya, and that an Officer Training School. This is in direct contrast with the Middle East where there were upwards of a dozen training establishments dealing with every aspect of military endeavour, including those specifically related to desert warfare.

The official histories nowhere offer an explanation for the lack of similar facilities in Malaya. At the very least there was a need for a jungle warfare training facility; where did Malaya Command think its men were going to fight...

The responsibility for these omissions has to go to the top. It was Lt-General Percival's job to see his men adequately prepared to engage the enemy and he did no such thing. It didn't help that there was a dearth of ability and/or initiative among his staff; that's what usually happens in inactive theatres. Every officer with any drive had

already wrangled his way into an active command. The British officers in the Indian divisions who might have been able to help staff these schools were on Indian Army pay scales (considerably higher than British Regular Army pay scales) and one must conclude that their reluctance to accept

staff positions in Malaya Command was in some part pecuniary.

There was no attempt to modify the standard infantry doctrine to the densely foliated tomography of Malaya. There were no briefings on Japanese infantry doctrine; it is doubtful that any British officer present had ever read the Japanese infantry manual. What is certain is that there was a general belief that any white man, particularly an English gentleman, would be more than a match for a short-sighted oriental!

Even as late as November when it was obvious to everyone that a Japanese attack was imminent, there was no appreciable change in Malaya Command's dispositions. The best part of two brigades still garrisoned airfields that were never going to service aircraft; at least not Allied planes!

The Australian division, held back in Johore, was an exception. It was commanded by the ablest soldier in the Australian Army, Major-General H. Gordon Bennett. His communications with the Australian Government reveal his own sense of unease with Malaya Command's deployments and the unsuitability of committing its forces in a piecemeal fashion. In his memoirs, every reference to Percival includes the words 'cautious', 'diffident', 'unassuming'. It is manifestly clear that Bennett considered the British commander unsuitable, if not downright incompetent, for the position.

There was no attempt to put Japanese amphibious capability into perspective. After the occupation of French Indo-China in April 1941, the nearest Japanese staging areas for an invasion of Malaya were in the southern Saigon/Cam Ranh Bay vicinity. That's 400 miles north of Kota Bharu and more than 600 miles north of Singapore! The likelihood of a direct assault on Singapore was minimal; yet Percival persisted in assigning his best British battalions to its defense. The total impracticality of maintaining a line of communications across the open ocean, in the monsoon season, even without enemy air interdiction, when an alternate, land route through Thailand was available, had no impact on Malaya Command's strategy. It's as if they expected the Japanese to land everywhere, in strength, and at the same time!

The Japanese did not employ purpose-built amphibious vessels as the United States would do in 1944; they relied on requisitioned merchant ships which had to be returned to their usual duty of transporting raw materials as soon as possible. This was known to Malaya Command. Such craft were not suitable for a contested landing, to say nothing of the economic turmoil which would have resulted from their loss. At Kota Bharu, where the Japanese invasion fleet did meet some air opposition, one transport was lost and two damaged from a total of twenty sorties by obsolete Hudson bombers. Here, and at Singora and Patani, the Japanese were unable to provide more than sporadic air cover. Even with drop tanks, no Japanese fighter had the range to reach south of Kota Bharu.

Malaya Command did not do its sums. A serious invasion south of Kota Bharu was impossible and, of course, the Japanese didn't try it. On the day the Japanese attacked, over 50% of Commonwealth strength, and arguably the best men in Percival's army, were 300 miles south of where they should have been. Bennett knew it, but was unable to convince the stultified British General Staff of their error.

Equipment

0	
1	Leg
2	Type 95s
3	Assault
4	75mm Gun
5	G3M3s
6	G4M1s
7	Ki48s
8	Ki21s
9	120mmGun
10	25 Pdrs
11	4.5" How
12	2 Pdr AT
13	Brens
14	Lt Tanks
15	Bofors
16	Arm Cars
17	Mxd Art
18	Mortars
19	Coastal

In war, the natural condition is to under-estimate your own strength and to over-estimate the enemy's. In this campaign, Malaya Command's continual over-estimation of Japanese military potential was never leavened by the events themselves! In the first two weeks of the war, amphibious landings were made at Singora and Patani in Thailand, at Kota Bharu in Malaya and at Aparri, Vigan and Legaspi in the Philippines as well as various smaller operations in the Pacific. There were only so many ships in the Japanese navy!

None of these events could force a change in British strategy. The 8th Australian division continued to languish in Johore while events in the north of Malaya went from bad to worse.

Before examining the course of the

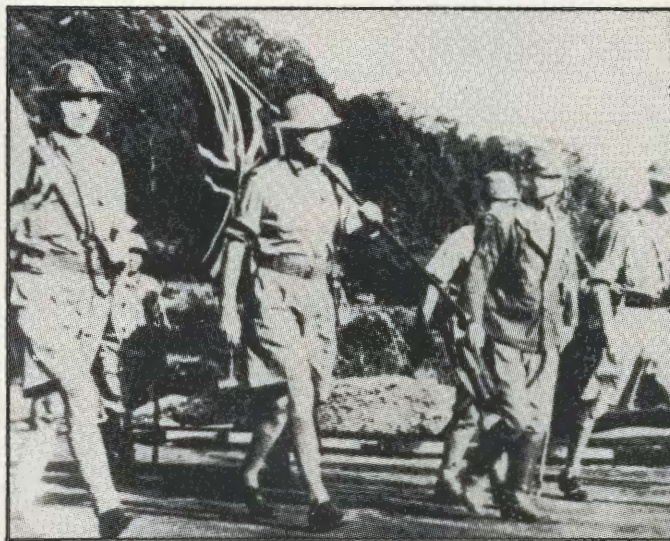
campaign, it's as well to look at the Japanese army, and how well it had been prepared for the coming struggle. The XXV Army, commanded by the very capable General Yamashita, comprised two regular infantry divisions, the 5th and the 18th, two brigade groups from the Guards division, three medium tank regiments, some

field artillery and assorted combat support units. A third infantry division, the 56th, remained in reserve in Japan and was not called upon. Army and naval air forces were assigned in support totalling about 700 combat aircraft.

Both infantry divisions were veterans of the long war in China but neither of them had any experience of jungle fighting. The advantages the Japanese army took with them into Malaya were resolute leadership, a fiery fighting spirit, great determination and a stubborn tenaciousness in adversity. They did enjoy air superiority but it was far from the complete ascendancy achieved by Allied air forces later in the war. Japanese air bases were a long way from the front, their fragile bombers capable of delivering only modest pay-loads and, most significantly, the quality of their maintenance and repairs left much to be desired.

Allied air policy in Malaya was not to challenge the enemy. Fighters were assigned to convoy protection duty, at which they did very well; not a single ship was lost to enemy air until the first week of February. Furthermore, it was coming onto the rainy season and poor weather made air operations futile about one day in three.

They had tanks as well. The Type 95 medium tank mounted a low velocity 57mm gun. The optics were poor and the vehicle under-powered. It had little



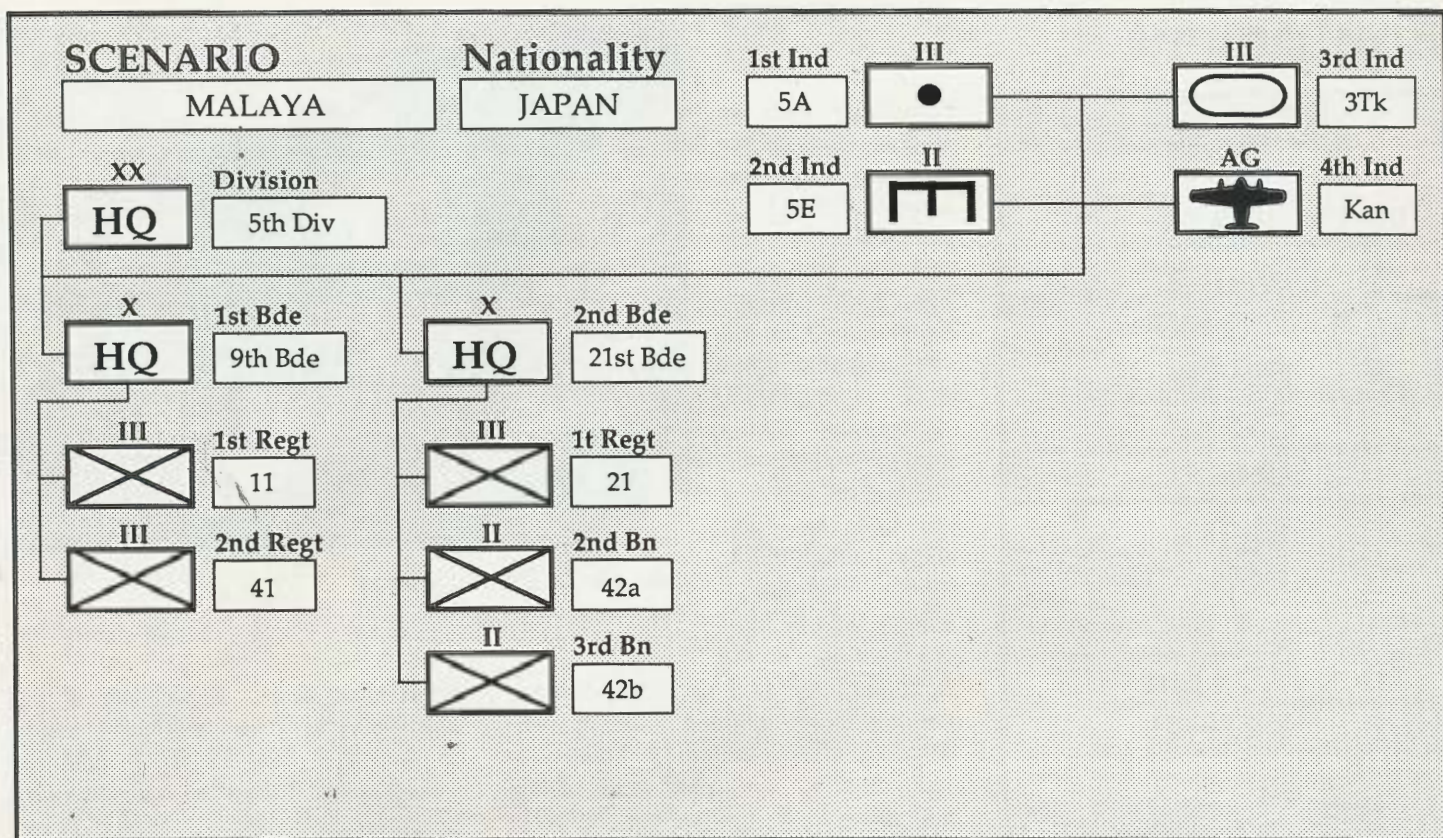
The Final Humiliation

British troops on their way to surrender

off-road capability. Tank doctrine was aggressive and very much in the German style; it's just that the vehicle was not up to the demands placed upon it. On several occasions later in the campaign, Australian 2-pdr anti-tank batteries made mincemeat of them. And there were very few tank models then in service anywhere in the world that a 2-pdr could dent!

Equally interesting is the list of their disadvantages. A Japanese infantry division was poorly supplied, by any standards, with artillery pieces; there were fewer of them, and of a smaller calibre, than a typical British division. There were fewer machine guns in the division, and no separate machine gun battalion. Radios were scarce and communications were by land line or, more usually, despatch runners.

Japanese military tradition was such that the nation's most able men gravitated to direct combat roles. Combat support, in particular logistics, intelligence and construction services were unreliable with the consequence that the Japanese soldier was often expected to fend for himself and/or go hungry. The Japanese General Staff were aware of the problem but so ingrained was the tradition of Bushido that they could do nothing about it. Much of the misery later experienced by Allied prisoners-of-war throughout South East Asia was due as much to the incompetence and inflexibility of gar-

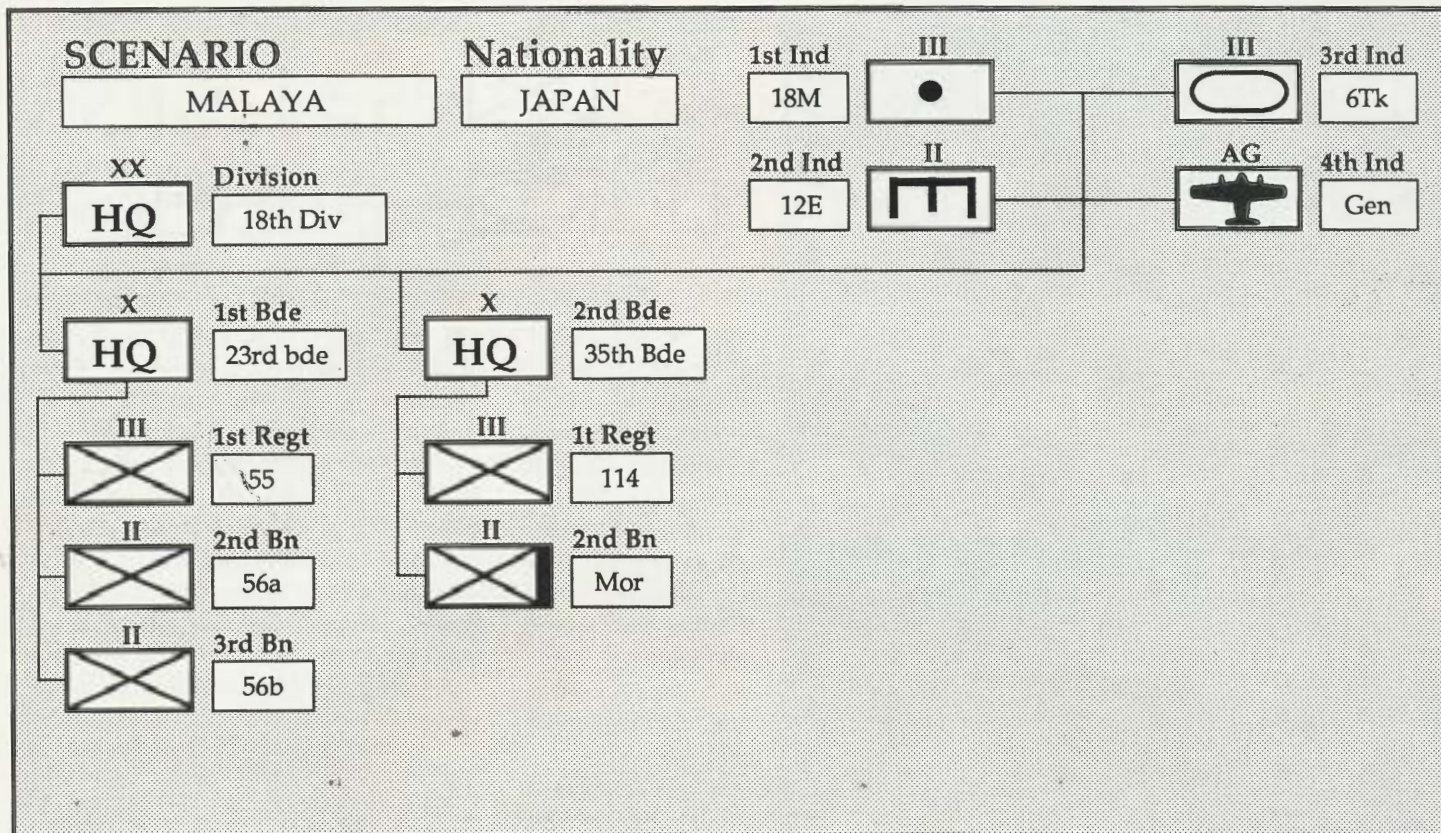


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	5th Div	9th Bde	21st Bde		
UNIT TYPE	[8]	Infantry	Infantry	Infantry		
HQ ADMIN	0-7	3	4	4		
LEADERSHIP	0-7	5	5	4		
HQ SUPPLY	0-7	4	7	7		
BRITTLE	0-1	0	0	0		
MOVEMENT	0-31	3	N/A	N/A		
ARRIVAL	0-99	2	N/A	N/A		
LOCATION	(x,y)	4,1	N/A	N/A		

BATTALION DATA

FORMATION	III/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	11	41			21	42a	42b										5A	5E	3Tk	Kan
LOCATION	(x,y)	5,1	4,1			0,1	8,2	8,1										4,1	5,1	0,1	26,6
CLASS	0-13	0	0			0	0	0										13	7	11	13
MODE	0-3	3	3			0	3	3										3	3	0	0
EQUIPM'T	0-31	1	1			1	1	1										4	3	2	5
MOVEMENT	0-31	4	4			4	4	4										2	4	7	0
ARRIVAL	0-99	1	1			27	1	1										3	2	4	13
MAX STREN.	0-15	15	15			15	8	8										6	6	9	10
INIT. STREN.	0-15	15	15			15	8	8										6	6	9	3
RATING	0-15	12	12			11	11	11										12	12	8	8
RANGE	0-15	0	1			1	0	0										4	0	0	15
FATIGUE	0-7	7	7			7	7	7										7	7	7	7
EXPERIENCE	0-7	6	6			5	5	5										5	5	4	5
ATTACHM'T	0-4	N/A	N/A			N/A	N/A	N/A										1	1	1	1

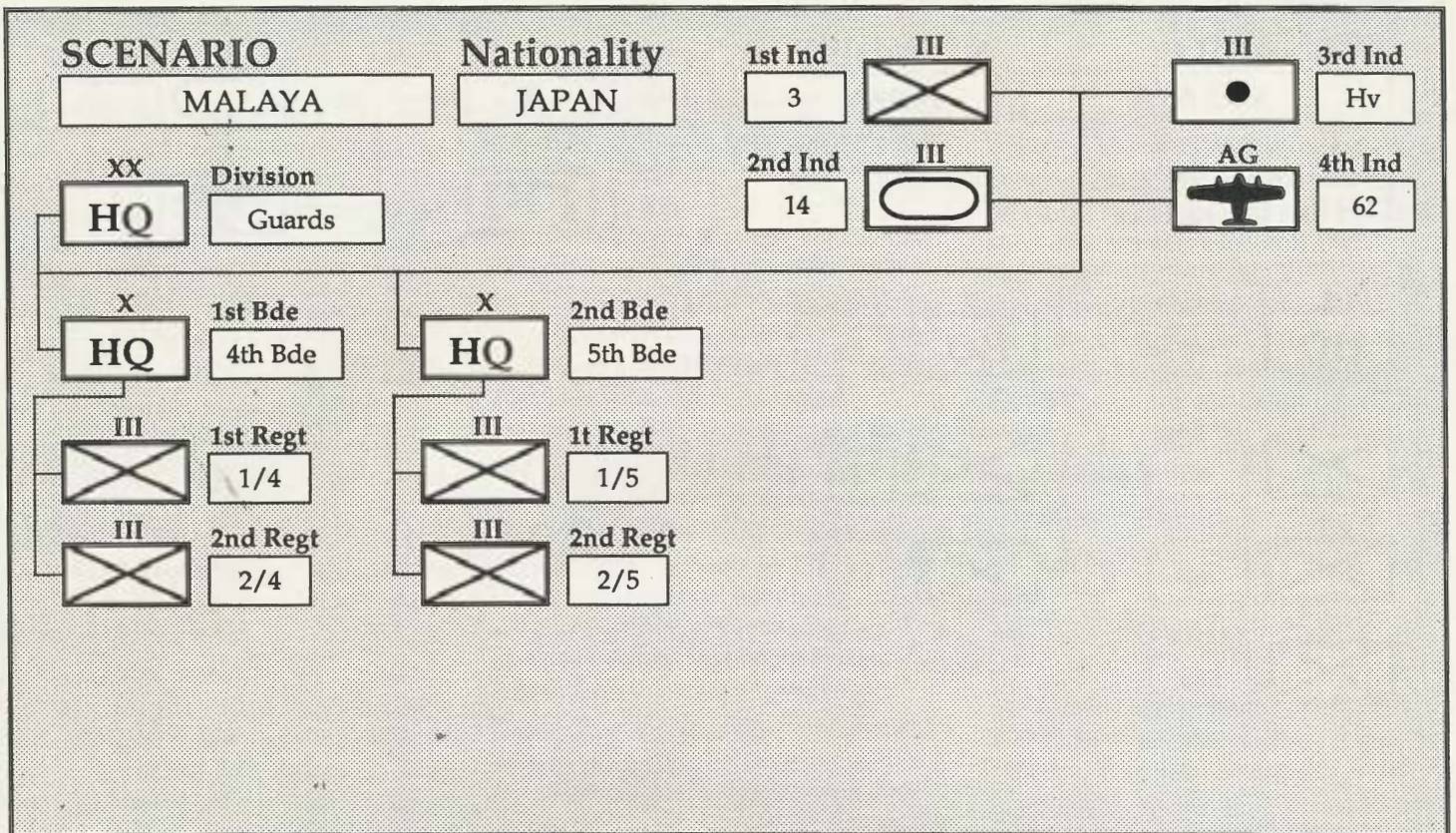


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ ID.	[8]	18th Div	23rd Bde	35th Bde		
UNIT TYPE	[8]	Infantry	Infantry	Infantry		
HQ ADMIN	0-7	5	5	5		
LEADERSHIP	0-7	5	4	6		
HQ SUPPLY	0-7	4	7	7		
BRITTLE	0-1	0	0	0		
MOVEMENT	0-31	3	N/A	N/A		
ARRIVAL	0-99	11	N/A	N/A		
LOCATION	(x,y)	0,1	N/A	N/A		

BATTALION DATA

FORMATION	III/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	55	56a	56b		114	Mor											18M	12E	6Tk	Gen
LOCATION	(x,y)	0,1	14,3	16,3		0,1	0,1											0,1	0,1	0,1	26,7
CLASS	0-13	0	0	0		0	4											13	7	11	13
MODE	0-3	0	3	3		0	0											0	0	0	0
EQUIPM'T	0-31	1	1	1		1	19											4	3	2	6
MOVEMENT	0-31	4	4	4		4	4											2	4	7	0
ARRIVAL	0-99	4	1	1		45	45											25	28	29	13
MAX STREN.	0-15	15	8	8		15	6											6	6	9	10
INIT. STREN.	0-15	15	8	8		15	6											6	6	9	3
RATING	0-15	12	12	12		12	11											12	12	8	8
RANGE	0-15	1	0	0		0	2											4	0	0	15
FATIGUE	0-7	7	7	7		7	7											7	7	7	7
EXPERIENCE	0-7	5	5	5		5	5											5	5	4	5
ATTACHM'T	0-4	N/A	N/A	N/A		N/A	N/A											1	1	1	1

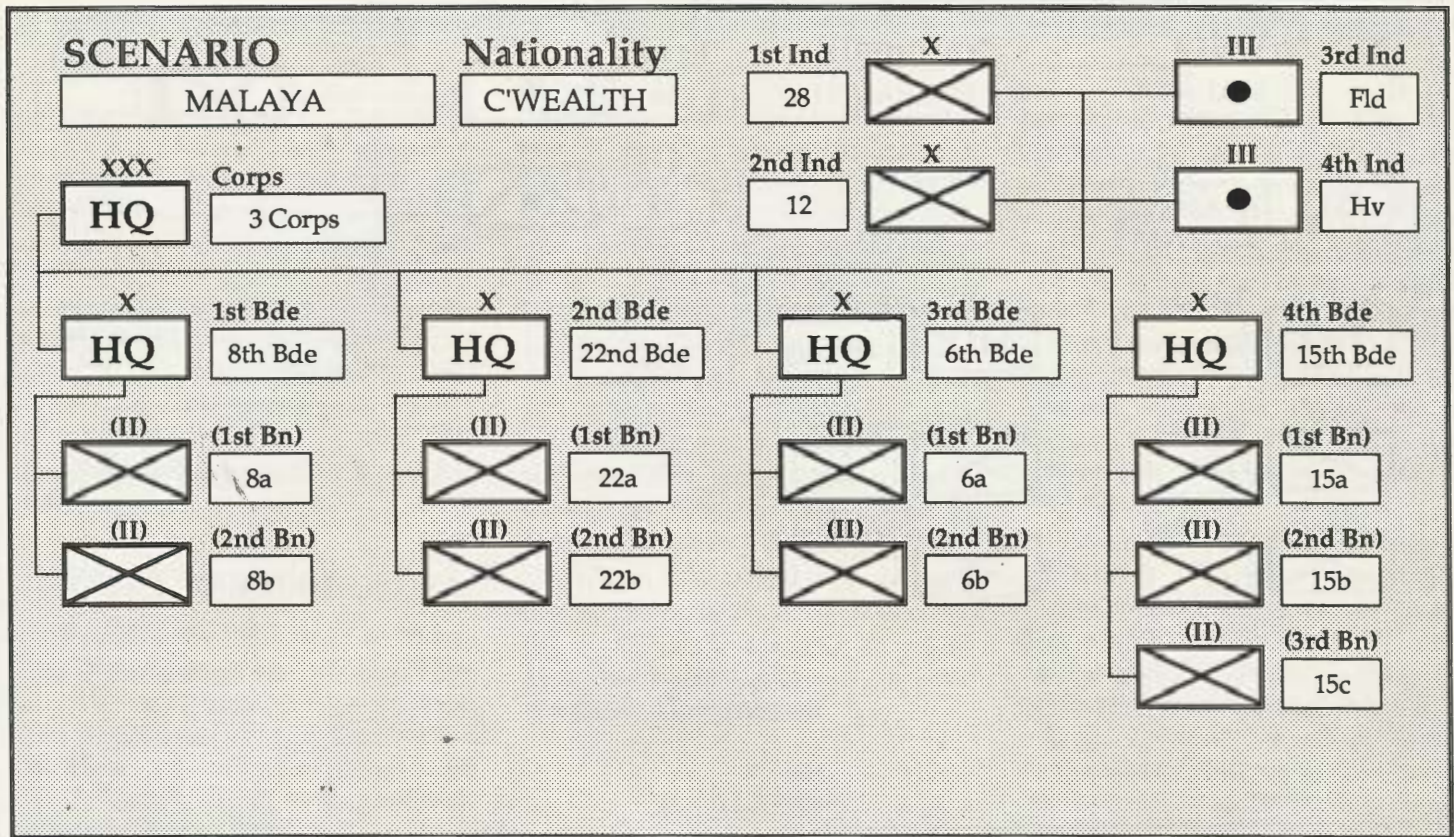


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	Guards	4th Bde	5th Bde		
UNIT TYPE	[8]	Infantry	Infantry	Infantry		
HQ ADMIN	0-7	5	6	6		
LEADERSHIP	0-7	6	6	5		
HQ SUPPLY	0-7	5	7	7		
BRITTLE	0-1	0	0	0		
MOVEMENT	0-31	4	N/A	N/A		
ARRIVAL	0-99	8	N/A	N/A		
LOCATION	(x,y)	0,1	N/A	N/A		

BATTALION DATA

FORMATION	III/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	1/4	2/4			1/5	2/5											3	14	Hv	62
LOCATION	(x,y)	0,1	0,1			0,1	0,1											0,1	0,1	0,1	27,7
CLASS	0-13	0	0			0	0											0	11	13	13
MODE	0-3	0	0			0	0											0	0	0	0
EQUIPM'T	0-31	1	1			1	1											1	2	9	8
MOVEMENT	0-31	4	4			4	4											4	7	2	0
ARRIVAL	0-99	7	8			13	13											35	14	41	43
MAX STREN.	0-15	9	9			9	9											9	6	9	10
INIT. STREN.	0-15	9	9			9	9											9	6	9	3
RATING	0-15	13	13			13	13											13	8	15	8
RANGE	0-15	0	0			0	0											1	4	4	15
FATIGUE	0-7	7	7			7	7											7	7	7	7
EXPERIENCE	0-7	6	6			6	6											6	4	4	5
ATTACHM'T	0-4	N/A	N/A			N/A	N/A											1	2	2	2

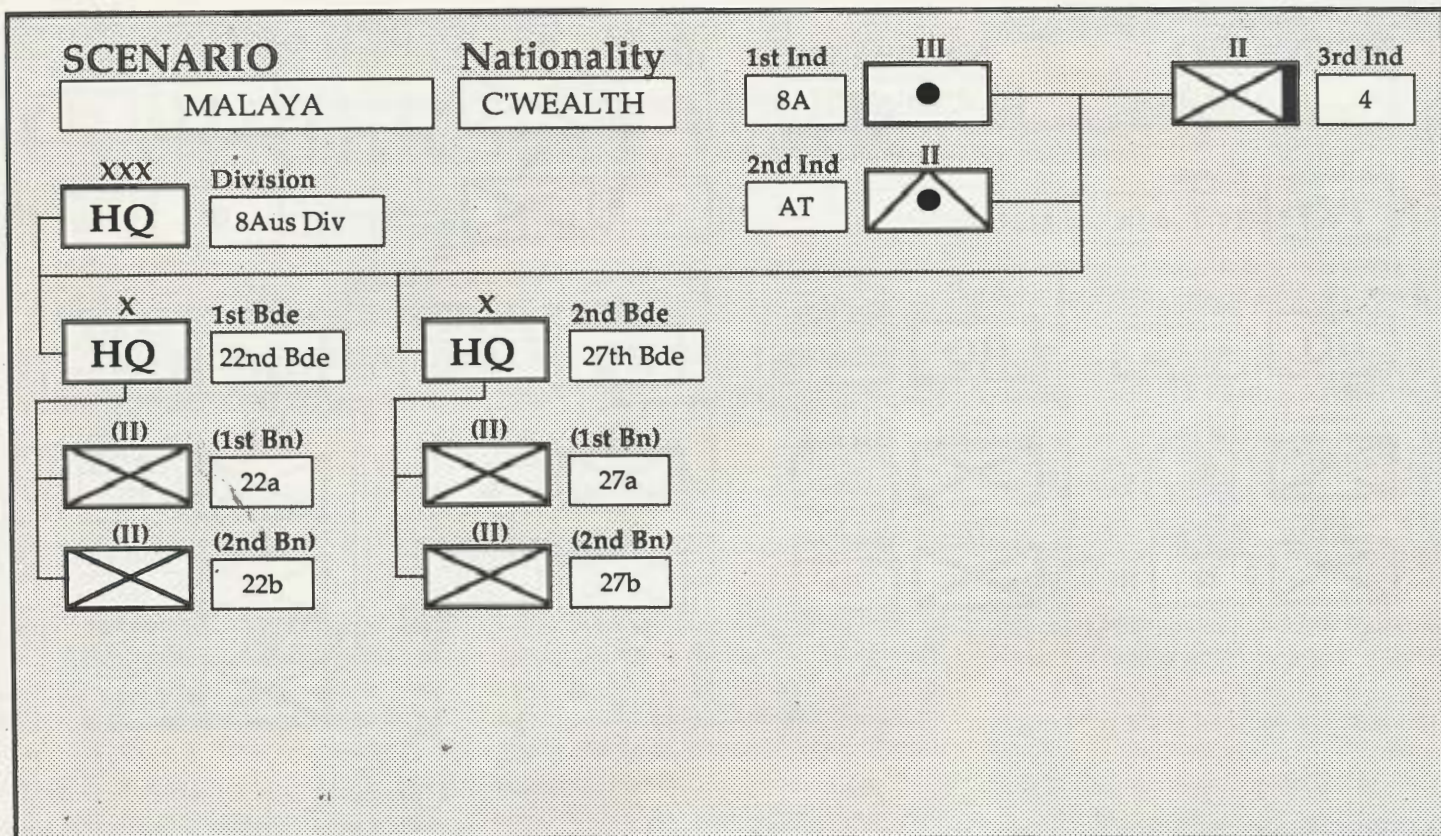


HEADQUARTERS DATA

FORMATION	HQ	XXX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	3 Corps	8th Bde	22nd Bde	6th Bde	15th Bde
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	Infantry
HQ ADMIN	0-7	3	2	2	2	2
LEADERSHIP	0-7	1	3	1	2	3
HQ SUPPLY	0-7	6	7	7	7	7
BRITTLE	0-1	0	0	0	0	0
MOVEMENT	0-31	1	N/A	N/A	N/A	N/A
ARRIVAL	0-99	0	N/A	N/A	N/A	N/A
LOCATION	(x,y)	19,20	N/A	N/A	N/A	N/A

UNIT DATA

FORMATION	(II)/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	8a	8b			22a	22b			6a	6b			15a	15b	15c		28	12	Fld	Hv
LOCATION	(x,y)	15,3	15,6			26,15	21,14			4,6	5,6			7,10	10,9	11,13		13,14	21,23	8,11	14,15
CLASS	0-13	0	0			0	0			0	0			0	0	0		0	0	13	13
MODE	0-3	0	0			0	0			0	0			0	0	0		0	0	0	0
EQUIPM'T	0-31	1	1			1	1			1	1			1	1	1		1	1	10	11
MOVEMENT	0-31	3	3			3	3			3	3			3	3	3		3	3	2	2
ARRIVAL	0-99	0	0			0	0			0	0			0	0	0		0	0	0	0
MAX STREN.	0-15	8	8			8	8			8	8			8	8	8		12	15	8	6
INIT. STREN.	0-15	8	8			8	8			8	8			8	8	8		12	15	8	6
RATING	0-15	8	8			8	8			8	8			8	8	8		9	8	10	12
RANGE	0-15	0	0			0	0			0	0			0	0	0		0	0	4	4
FATIGUE	0-7	7	7			7	7			7	7			7	7	7		7	7	7	7
EXPERIENCE	0-7	4	4			4	4			4	4			4	4	4		5	4	4	4
ATTACHM'T	0-4	N/A	N/A			N/A	N/A			N/A	N/A			N/A	N/A	N/A		1	4	3	3

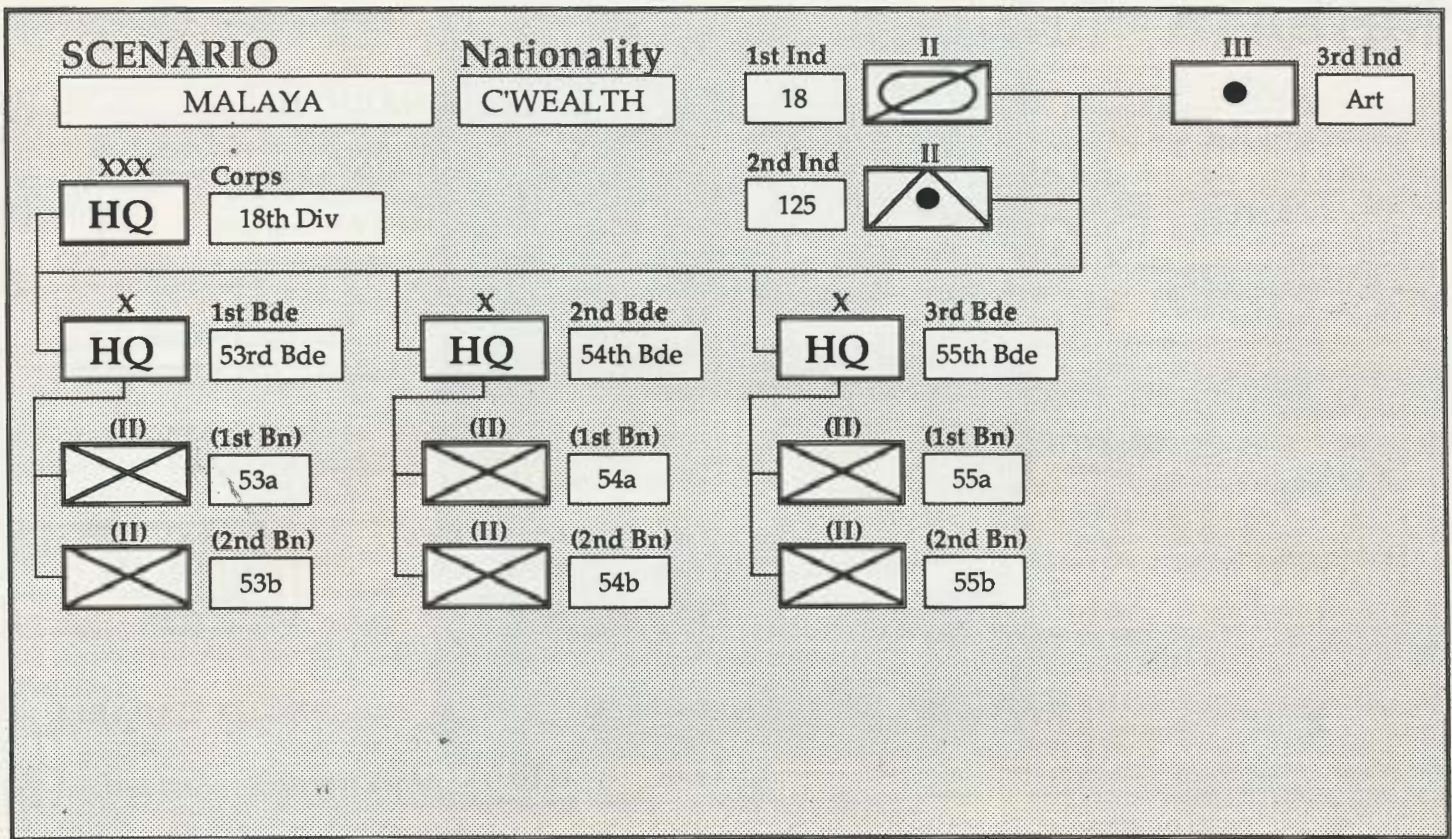


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	8Aus Div	22nd Bde	27th Bde		
UNIT TYPE	[8]	Infantry	Infantry	Infantry		
HQ ADMIN	0-7	5	5	5		
LEADERSHIP	0-7	7	6	5		
HQ SUPPLY	0-7	4	7	7		
BRITTLE	0-1	0	0	0		
MOVEMENT	0-31	3	N/A	N/A		
ARRIVAL	0-99	0	N/A	N/A		
LOCATION	(x,y)	32,23	N/A	N/A		

UNIT DATA

FORMATION	(II)/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	22a	22b			27a	27b											8A	AT	4	
LOCATION	(x,y)	30,19	32,20			33,24	33,23											32,24	30,23	33,24	
CLASS	0-13	0	0			0	0											13	9	4	
MODE	0-3	0	0			0	0											0	0	0	
EQUIPM'T	0-31	1	1			1	1											10	12	13	
MOVEMENT	0-31	4	4			4	4											2	4	4	
ARRIVAL	0-99	0	0			0	0											0	0	37	
MAX STREN.	0-15	9	9			9	9											4	4	4	
INIT. STREN.	0-15	9	9			9	9											4	4	4	
RATING	0-15	10	10			8	8											9	8	12	
RANGE	0-15	0	0			0	0											4	1	1	
FATIGUE	0-7	7	7			7	7											7	7	7	
EXPERIENCE	0-7	5	5			4	4											4	4	5	
ATTACHM'T	0-4	N/A	N/A			N/A	N/A											2	2	2	



HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	18th Div	53rd Bde	54th Bde	55th Bde	
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	
HQ ADMIN	0-7	4	4	4	4	
LEADERSHIP	0-7	3	4	2	3	
HQ SUPPLY	0-7	5	7	7	7	
BRITTLE	0-1	0	0	0	0	
MOVEMENT	0-31	1	N/A	N/A	N/A	
ARRIVAL	0-99	38	N/A	N/A	N/A	
LOCATION	(x,y)	33,24	N/A	N/A	N/A	

UNIT DATA

FORMATION	(II)/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	53a	53b			54a	54b			55a	55b							18	125	Art	
LOCATION	(x,y)	33,24	33,24			33,24	33,24			33,24	33,24							33,24	33,24	33,24	
CLASS	0-13	0	0			0	0			0	0							11	9	13	
MODE	0-3	0	0			0	0			0	0							0	0	0	
EQUIPM'T	0-31	1	1			1	1			1	1							14	12	10	
MOVEMENT	0-31	3	3			3	3			3	3							7	4	2	
ARRIVAL	0-99	36	36			49	49			51	51							39	41	42	
MAX STREN.	0-15	9	9			9	9			9	9							3	4	6	
INIT. STREN.	0-15	9	9			9	9			9	9							3	4	6	
RATING	0-15	8	8			8	8			8	8							7	8	9	
RANGE	0-15	0	0			0	0			0	0							0	0	4	
FATIGUE	0-7	7	7			7	7			7	7							7	7	7	
EXPERIENCE	0-7	4	4			4	4			4	4							4	4	4	
ATTACHM'T	0-4	N/A	N/A			N/A	N/A			N/A	N/A							1	1	1	

MALAYA - Briefing

AXIS			ALLIED		
SIDE [16] JAPAN			SIDE [16] COMMONWEALTH		
CORPS [16] 25th Army			CORPS [16] Malaya Command		
COMMANDER [16] Gen. Yamashita			COMMANDER [16] Lt-Gen. Percival		
DAY	NIGHT	SUPPORT	DAY	NIGHT	
25	0	QUANTITY (0-99)	15	0	
0	0	RELIABILITY (0-3)	0	0	
8	0	RATING (0-15)	6	0	
AIR SUPERIORITY (0-7)					
STATUS =		1	STRONG AXIS		
RELIABILITY =		1	ERRATIC		

SCENARIO [16] Fall of Malaya	
BRIEFING [26] A Very British Catastrophe Dec 8th, 1941 - Feb 15th, 1942	
(0-3)	START = 0
(1-31)	DATE = 8
(1-12)	MONTH = 12
(0-99)	YEAR = 41
(0-20)	CENTURY = 19
(1-16)	LENGTH = 17
(0-3)	WEATHER = 3
(0-7)	FORECAST = 2
(0-7)	CLIMATE = 2
(0-31)	MECH MIN = 6
BRITTLINESS	
(0-9)	AXIS = 00 %
(0-9)	ALLIED = 00 %
NIGHT CAPABLE	
(0-1)	AXIS = 1
(0-1)	ALLIED = 0
nite 8th FEB 1942	
CLEAR BUILDING TROPICAL	

MALAYA - Terrain Effects Chart

TERRAIN CODE (T0-T15)	TERRAIN NAME [10]	TERRAIN COSTS PER HEX		ATTACK EFFECTS		
		MECH (0-31)	NON-MECH (0-31)	ARM (0-7)	ART (0-7)	INF (0-7)
T0	Ocean	0	0	0	0	0
T1	Plantation	2	2	7	7	7
T2	Swamp	0	3	2	3	4
T3	Jungle	6	3	3	2	4
T4	Mountains	6	3	3	3	4
T5	Off-Map AB	0	0	0	0	0
T6	-	-	-	-	-	-
T7	-	-	-	-	-	-
T8	-	-	-	-	-	-
T9	-	-	-	-	-	-
T10	-	-	-	-	-	-
T11	-	-	-	-	-	-
T12	-	-	-	-	-	-
T13	-	-	-	-	-	-
T14	-	-	-	-	-	-
T15	-	-	-	-	-	-
-	ROAD	1	1	N.A.	N.A.	N.A.
-	FORT	N.A.	N.A.	2	2	3
-	CITY	N.A.	N.A.	4	5	4
-	BRIDGE	1	2	4	7	4
-	RIVER	N.A.	4	3	7	3

MALAYA - Objectives & Miscellaneous Factors

I.D.	Name [11]	Map Loc [x,y]	Div. (0-3)	Def. (0-1)	Start (1-99)	End (1-99)	Pts/T (0-30)	Pts/E (0-255)
1(AX)	Jitra	4,6	1	0	1	67	1	5
2(AX)	S. Patani	7,10	1	0	1	67	1	5
3(AX)	Ipoh	13,14	1	0	1	67	1	5
4(AX)	Kota Bharu	15,3	2	0	1	67	1	5
5(AX)	K. Lipis	18,14	1	0	1	67	1	5
6(AX)	K. Lumpur	19,20	1	1	1	67	2	25
7(AX)	K. Dungun	24,8	2	0	1	67	1	5
8(AX)	Gemas	25,21	1	0	1	67	2	10
9(AX)	Kuantan	26,15	2	0	1	67	1	5
10(AX)	Kluang	30,23	1	0	1	67	2	10
11(AX)	Mersing	32,20	3	0	1	67	1	10
12(AX)	Johore	25,24	3	0	1	67	2	25
1(AL)	Jitra	4,6	0	0	1	67	1	5
2(AL)	S. Patani	7,10	0	0	1	67	1	5
3(AL)	Ipoh	13,14	0	0	1	67	2	10
4(AL)	Kota Bharu	15,3	0	0	1	67	1	5
5(AL)	K. Lipis	18,14	0	0	1	67	1	10
6(AL)	K. Lumpur	19,20	1	1	1	67	2	25
7(AL)	K. Dungun	24,8	0	0	1	67	1	5
8(AL)	Gemas	25,21	3	0	1	67	1	25
9(AL)	Kuantan	26,15	0	0	1	67	1	10
10(AL)	Kluang	30,23	3	0	1	67	1	10
11(AL)	Mersing	32,20	2	1	1	67	1	10
12(AL)	Johore	25,24	2	1	1	67	2	25

ADJACENT ENEMY HEX PENALTY (AXIS/ALLIED) (0-15)							
1st Hex =	<table border="1"><tr><td>0</td><td>2</td></tr></table>	0	2	4th Hex =	<table border="1"><tr><td>1</td><td>4</td></tr></table>	1	4
0	2						
1	4						
2nd Hex =	<table border="1"><tr><td>0</td><td>2</td></tr></table>	0	2	5th Hex =	<table border="1"><tr><td>1</td><td>4</td></tr></table>	1	4
0	2						
1	4						
3rd Hex =	<table border="1"><tr><td>1</td><td>4</td></tr></table>	1	4	6th Hex =	<table border="1"><tr><td>1</td><td>4</td></tr></table>	1	4
1	4						
1	4						

VICTORY POINTS PER STRENGTH POINT ELIM. (0-15)				
	MECH	NON MECH		
AXIS	<table border="1"><tr><td>10</td></tr></table>	10	<table border="1"><tr><td>5</td></tr></table>	5
10				
5				
ALLIED	<table border="1"><tr><td>3</td></tr></table>	3	<table border="1"><tr><td>3</td></tr></table>	3
3				
3				

MAP SIZE		
ACROSS (0-2)	<table border="1"><tr><td>2</td></tr></table>	2
2		
DOWN (0-3)	<table border="1"><tr><td>3</td></tr></table>	3
3		



Situation Map for the Singapore Scenario

risson and logistics units as it was to deliberate brutality.

Foremost, however, among these disadvantages was Japanese infantry doctrine itself. No other nation went into the Second World War with the same handicap! There was no provision for any kind of retreat or withdrawal, nor was there any variation in the principles of attack. From beginning to end of the Malayan Campaign, the Japanese used exactly the same method each time. The front of the Commonwealth position would be pinned while squad/company detachments worked away at the flanks, penetrating well into the rear if they could. Once the infiltration was complete and flanking fire started, a frontal assault would dislodge the shaken defenders and another retreat, or rout, would be on. Time and again, Commonwealth troops were pushed back by an attacking force barely half as numerous as the defenders.

The best response to an attack of this kind is to put in a determined counter-attack. The British never really tried

this. The Australians did, and scored the only notable successes in the entire Campaign. By then, however, with the Japanese three-quarters of the way to Singapore, it was too late.

As the Americans were to demonstrate later in the year on Guadalcanal, the inflexibility of Japanese doctrine was a crucial weakness. If an attack didn't work the first time, they'd do it again... and again! Resolute commanders with the right tactics could beat off a Japanese attack every time. The Russians, at Nomonhan in 1939, showed that; Viscount Slim showed it in India in 1944.

When the first reports of the Japanese landings reached Malaya Command, there was a half-hearted attempt to activate Operation Matador, the planned offensive into Thailand to secure, or at least quarantine, the southern ports of Singora and Patani. It didn't come to anything and defensive position was set up at Jitra. The Japanese began probing the defenses on the 10th and by the 13th they had unhinged the static defenders. This was

the first of many retreats, and more orderly than most. Sometimes, as on the Perak and Slim Rivers, wholesale routs occurred and with them the loss of entire artillery batteries, motorised transport parks and huge quantities of supplies.

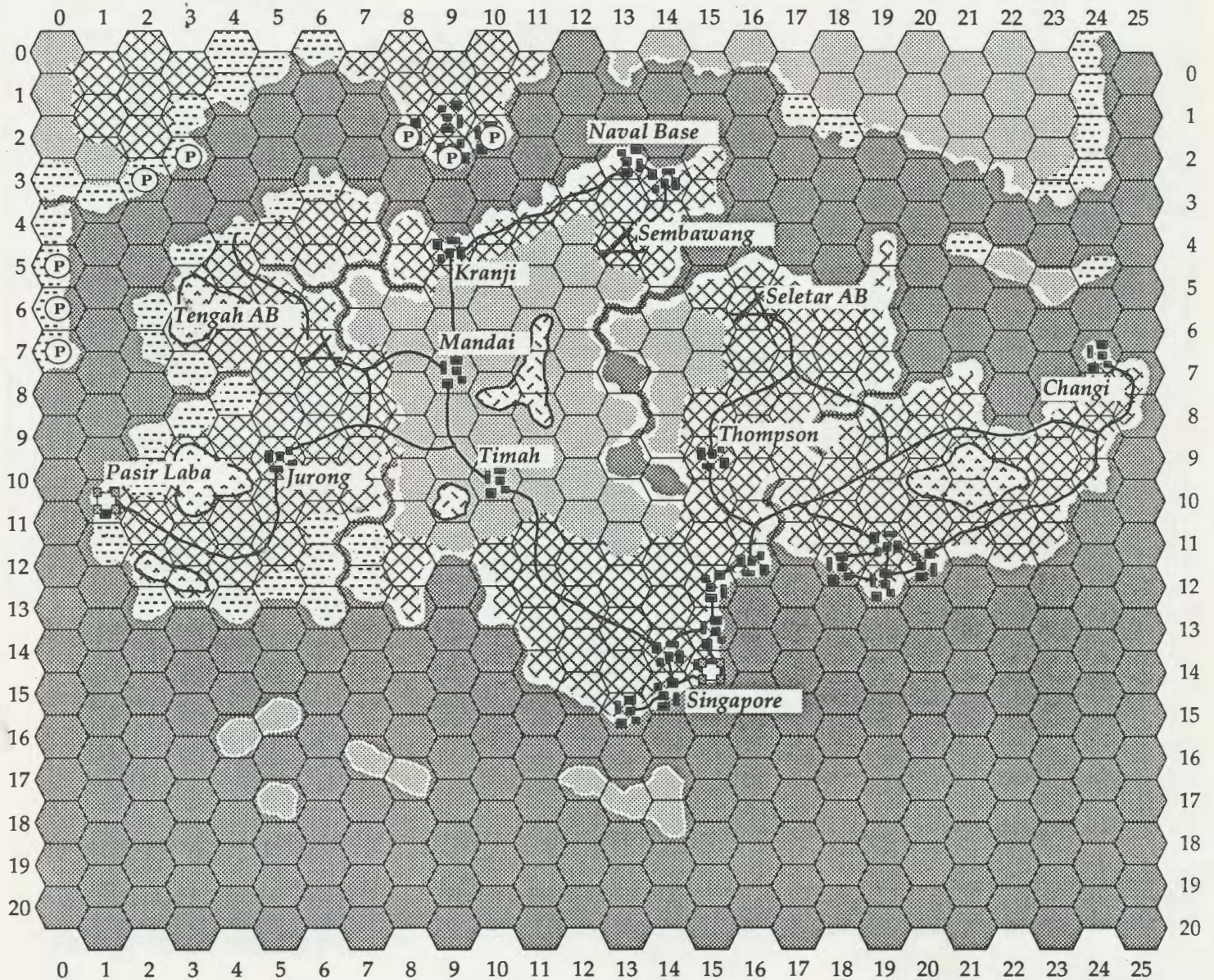
Malaya Command was a beaten army before it ever began to fight! They were all the time trying to hang onto territory, to hold this line or that; in war you win by beating the other side's army, by killing their troops. There was never a plan to concentrate on a part of Yamashita's army, to mass against it, and try to crush it. The British were short of modern aircraft and they didn't have as much artillery as they wanted; though they did have more of the latter than the Japanese, and for most of the campaign,

much more ammunition. Such short-comings would not have prevented a determined and resolute attack. The Commonwealth army outnumbered the Japanese throughout the campaign, they had good road and rail communications and the Japanese air force could provide only sporadic interdiction. The means and the men were on hand to force a major battle; only the will was lacking.

The blame for the debacle lies squarely with Percival and his staff. Julius Caesar, de Turenne, Marlborough, Napoleon; they all said it. There are no bad soldiers... only bad generals!

Defeat followed by defeat will break the spirit of even the toughest troops. When soldiers lose confidence in their officers, an army is ruined. Malaya Command's inability, and unwillingness, to get onto the front foot doomed the defense of Malaya from the very start. The final debacle on Singapore in the middle of February was the inevitable result.

SINGAPORE- Game Map



CREATING THE SCENARIOS

If this is the first time you have tried to transfer a magazine scenario onto a save-game disk, you will need to be familiar with the Design Section of the Battlefront Game Manual.

Note that if you are building up the scenario on an IBM/Tandy version of the game, there are a couple of additional data entries to be made. These are noted where applicable. Furthermore, there is some additional information for IBM users at the end of this section. Be sure to read it, especially if

you have an EGA/VGA card and want to take advantage of our "full map" graphics. Issue 14 of Run 5 contains a detailed guide on the use of "full map" graphics on the IBM.

Macintosh users should follow the instructions in their game manual. In Issue 15 of Run 5, there is a detailed guide on WarPaint™ for Macintosh users.

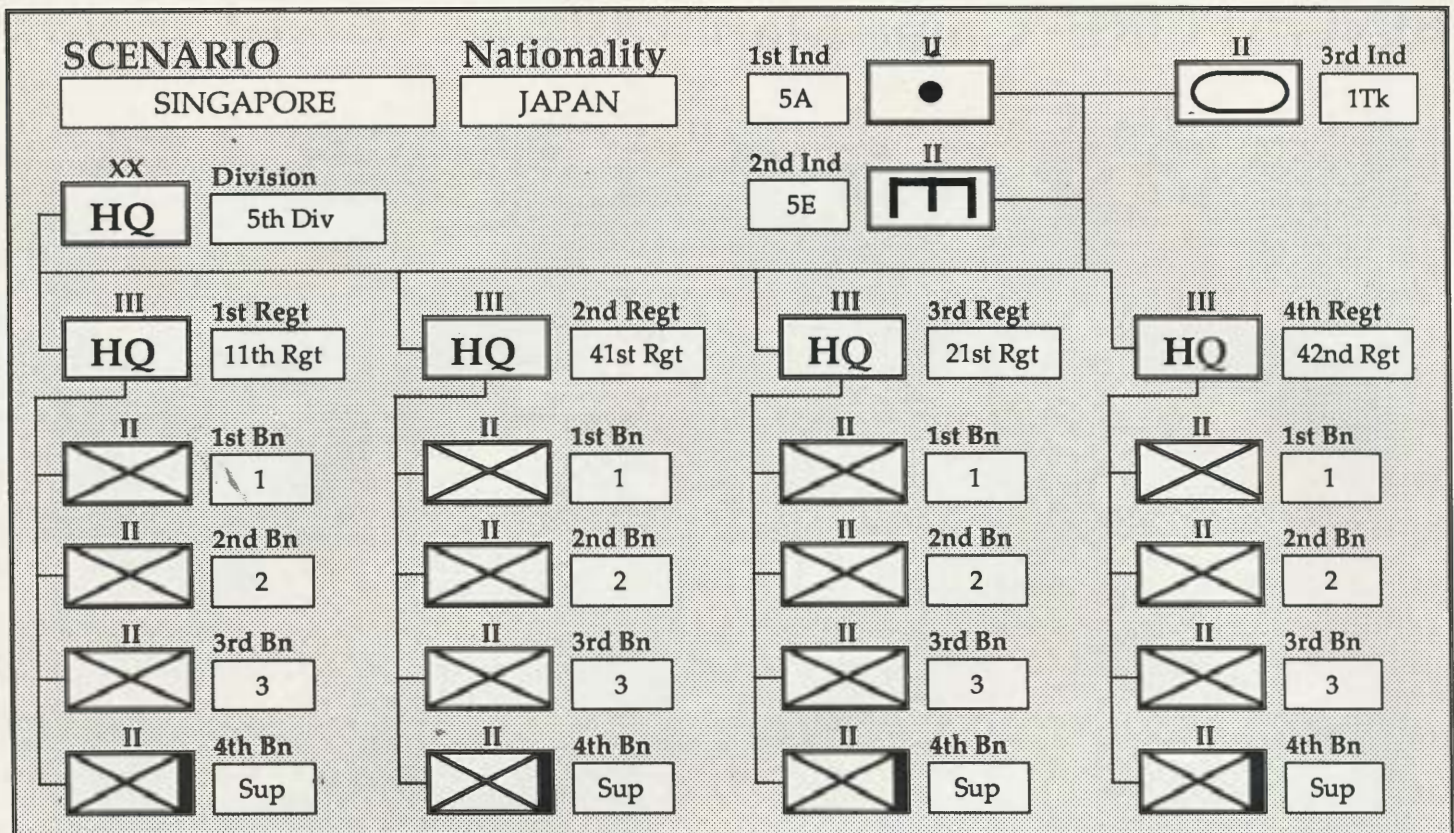
IIGS and Amiga users should follow the instructions in their game manual. Most of the hints for Macintosh users are applicable to IIGS and Amiga users.

Note that the movement mechanics in

the IBM/Macintosh/IIGS/Amiga versions are more efficient than those in the AII/C64 versions and this may slightly alter play balance.

The Minor Combat Effects are as follows. For the Fall of Malaya scenario, the Fort Enhancement values are 2. The City Enhancement values are 0. The General Enhancement values are 4 (Axis) and 2 (Allied). For the Singapore scenario, the Fort Enhancement values are 2 (Axis) and 3 (Allied). The City En-

Continued on p. 48

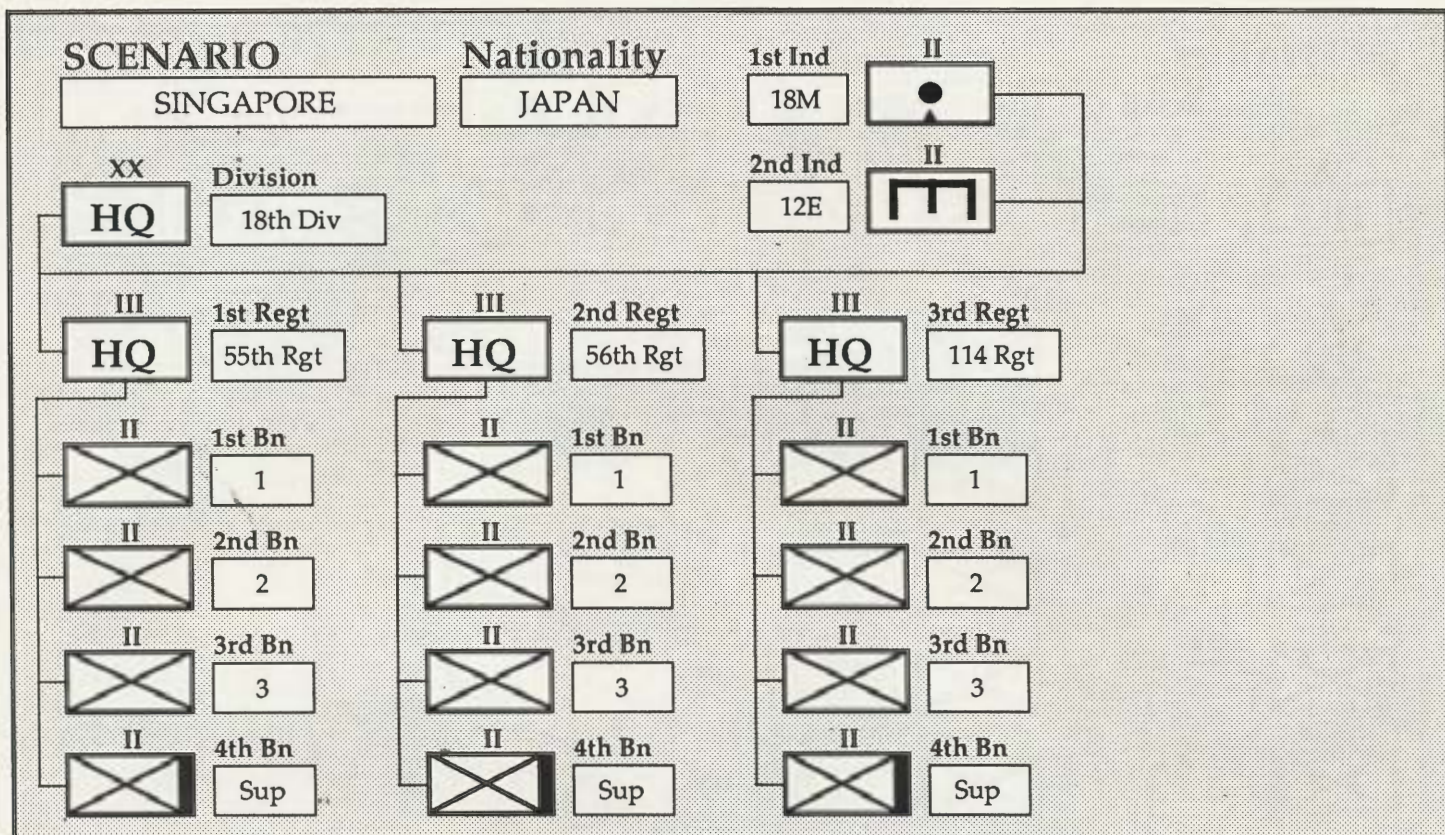


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/RHQ	2/RHQ	3/RHQ	4/RHQ
HQ I.D.	[8]	5th Div	11th Rgt	41st Rgt	21st Rgt	42nd Rgt
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	Infantry
HQ ADMIN	0-7	4	5	5	5	5
LEADERSHIP	0-7	5	6	5	4	7
HQ SUPPLY	0-7	4	7	7	7	7
BRITTLE	0-1	0	0	0	0	0
MOVEMENT	0-31	4	N/A	N/A	N/A	N/A
ARRIVAL	0-99	9	N/A	N/A	N/A	N/A
LOCATION	(x,y)	2,5	N/A	N/A	N/A	N/A

BATTALION DATA

FORMATION	II/III	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	1	2	3	Sup	1	2	3	Sup	1	2	3	Sup	1	2	3	Sup	5A	5E	1Tk	
LOCATION	(x,y)	6,2	5,2	3,3	4,3	6,2	5,2	3,3	4,3	6,2	5,2	3,3	4,3	6,2	5,2	3,3	4,3	5,2	4,3	5,2	
CLASS	0-13	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	13	7	11	
MODE	0-3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
EQUIPM'T	0-31	1	1	1	18	1	1	1	18	1	1	1	18	1	1	1	18	4	3	2	
MOVEMENT	0-31	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	7	
ARRIVAL	0-99	4	4	4	4	5	5	5	5	5	5	5	5	13	13	13	13	9	5	11	
MAX STREN.	0-15	9	9	9	6	9	9	9	6	9	9	9	6	9	9	9	6	9	9	6	
INIT. STREN.	0-15	8	8	8	6	8	8	8	6	9	9	9	6	8	8	8	6	9	9	6	
RATING	0-15	9	9	9	10	9	9	9	10	9	9	9	10	9	9	9	10	11	11	7	
RANGE	0-15	0	0	1	4	0	0	1	4	0	0	1	4	0	0	1	4	7	0	0	
FATIGUE	0-7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
EXPERIENCE	0-7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	
ATTACHM'T	0-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	1	1	

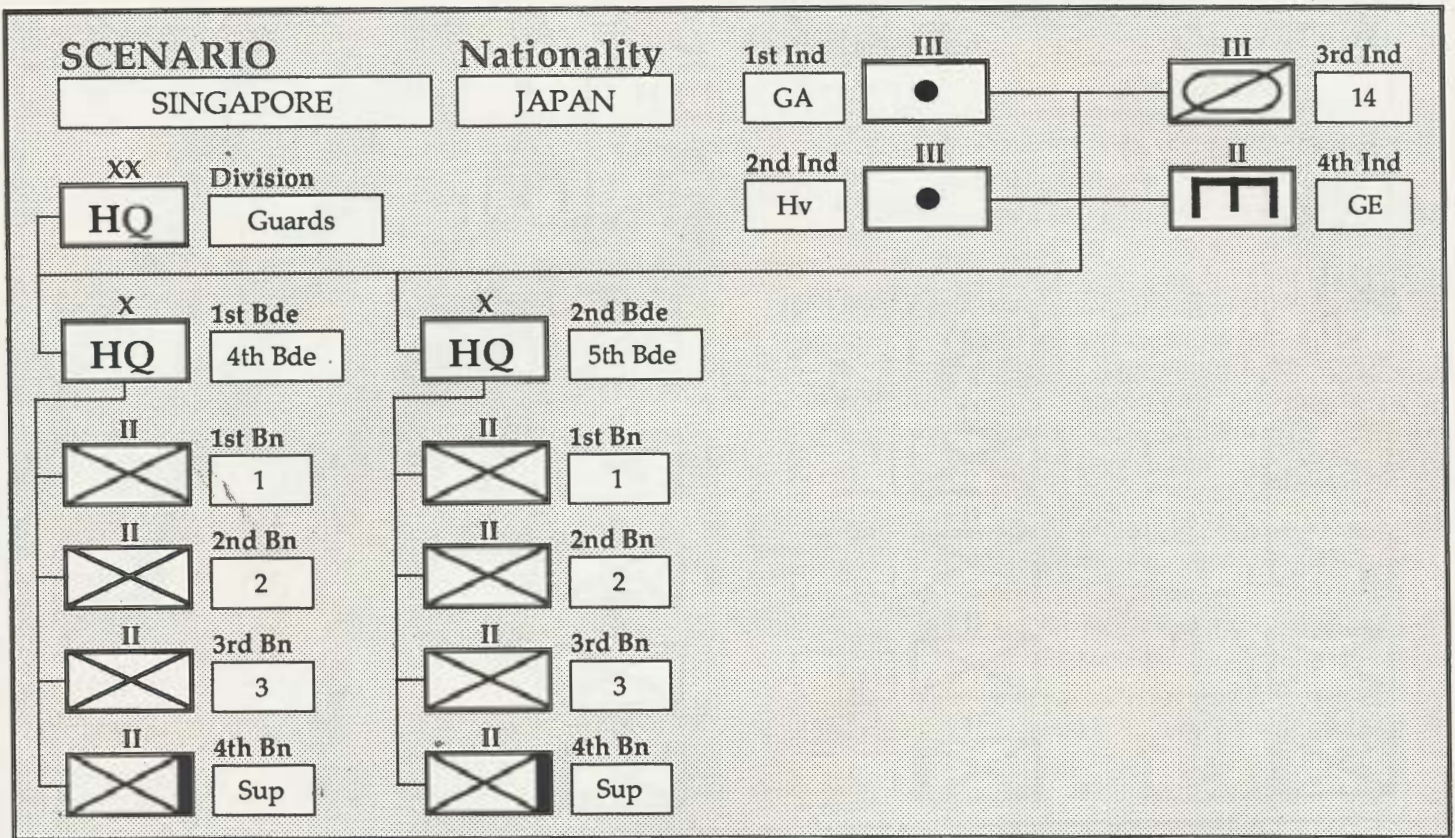


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/RHQ	2/RHQ	3/RHQ	4/RHQ
HQ I.D.	[8]	18th Div	55th Rgt	56th Rgt	114 Rgt	
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	
HQ ADMIN	0-7	4	5	5	5	
LEADERSHIP	0-7	6	5	6	5	
HQ SUPPLY	0-7	4	7	7	7	
BRITTLE	0-1	0	0	0	0	
MOVEMENT	0-31	3	N/A	N/A	N/A	
ARRIVAL	0-99	9	N/A	N/A	N/A	
LOCATION	(x,y)	2,8	N/A	N/A	N/A	

BATTALION DATA

FORMATION	II/III	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	1	2	3	Sup	1	2	3	Sup	1	2	3	Sup					18M	5E		
LOCATION	(x,y)	1,5	1,6	2,8	1,7	1,5	1,6	2,8	1,7	1,5	1,6	2,8	1,7					2,8	2,8		
CLASS	0-13	0	0	0	4	0	0	0	4	0	0	0	4					13	7		
MODE	0-3	3	3	3	3	3	3	3	3	3	3	3	3					3	3		
EQUIPM'T	0-31	1	1	1	18	1	1	1	18	1	1	1	18					4	3		
MOVEMENT	0-31	5	5	5	5	5	5	5	5	5	5	5	5					4	5		
ARRIVAL	0-99	4	4	4	4	5	5	5	5	13	13	13	13					11	7		
MAX STREN.	0-15	9	9	9	6	9	9	9	6	9	9	9	6					6	9		
INIT. STREN.	0-15	8	8	8	6	8	8	8	6	8	8	8	6					6	9		
RATING	0-15	9	9	9	10	9	9	9	10	9	9	9	10					9	10		
RANGE	0-15	0	0	1	4	0	0	1	4	0	0	1	4					7	1		
FATIGUE	0-7	7	7	7	7	7	7	7	7	7	7	7	7					7	7		
EXPERIENCE	0-7	5	5	5	5	5	5	5	5	5	5	5	5					5	5		
ATTACHM'T	0-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					1	1		

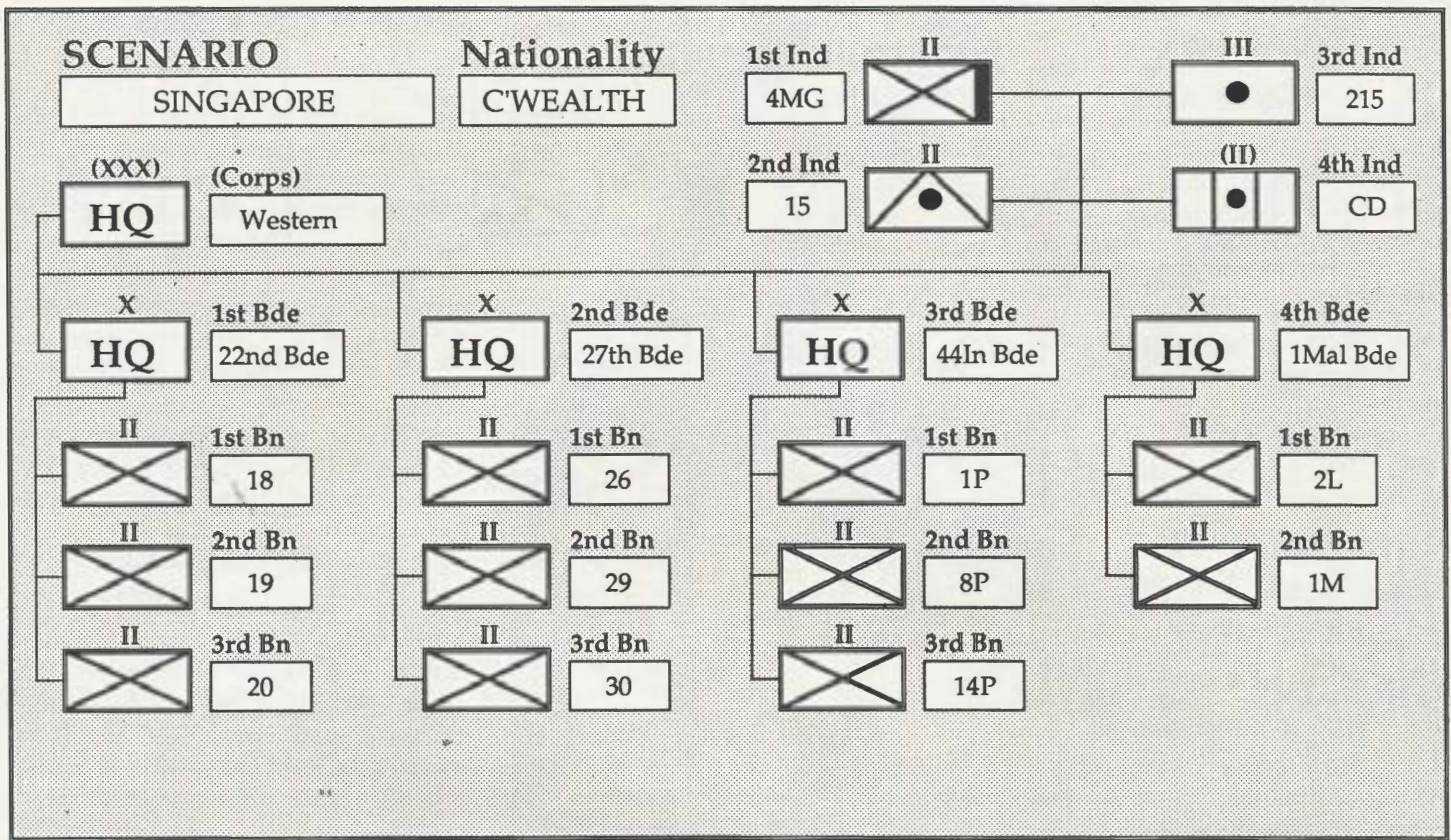


HEADQUARTERS DATA

FORMATION	HQ	XX HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	Guards	4th Bde	5th Bde		
UNIT TYPE	[8]	Infantry	Infantry	Infantry		
HQ ADMIN	0-7	5	5	5		
LEADERSHIP	0-7	6	6	7		
HQ SUPPLY	0-7	4	7	7		
BRITTLE	0-1	0	0	0		
MOVEMENT	0-31	3	N/A	N/A		
ARRIVAL	0-99	15	N/A	N/A		
LOCATION	(x,y)	10,3	N/A	N/A		

BATTALION DATA

FORMATION	II/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	1	2	3	Sup	1	2	3	Sup									GA	Hv	14	GE
LOCATION	(x,y)	8,3	9,3	11,2	10,3	8,3	9,3	11,2	10,3									10,3	9,1	10,3	10,3
CLASS	0-13	0	0	0	4	0	0	0	4									13	13	11	7
MODE	0-3	3	3	3	3	3	3	3	3									3	0	3	3
EQUIPM'T	0-31	1	1	1	18	1	1	1	18									4	9	2	3
MOVEMENT	0-31	5	5	5	5	5	5	5	5									4	0	7	5
ARRIVAL	0-99	12	12	12	12	13	13	13	13									17	13	16	15
MAX STREN.	0-15	9	9	9	6	9	9	9	6									6	9	6	9
INIT. STREN.	0-15	8	8	8	6	8	8	8	6									6	9	5	7
RATING	0-15	10	10	10	10	10	10	10	10									9	12	7	10
RANGE	0-15	0	0	1	4	0	0	1	4									7	15	0	1
FATIGUE	0-7	7	7	7	7	7	7	7	7									7	7	7	7
EXPERIENCE	0-7	6	6	6	5	6	6	6	5									6	6	4	6
ATTACHM'T	0-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									1	1	1	1

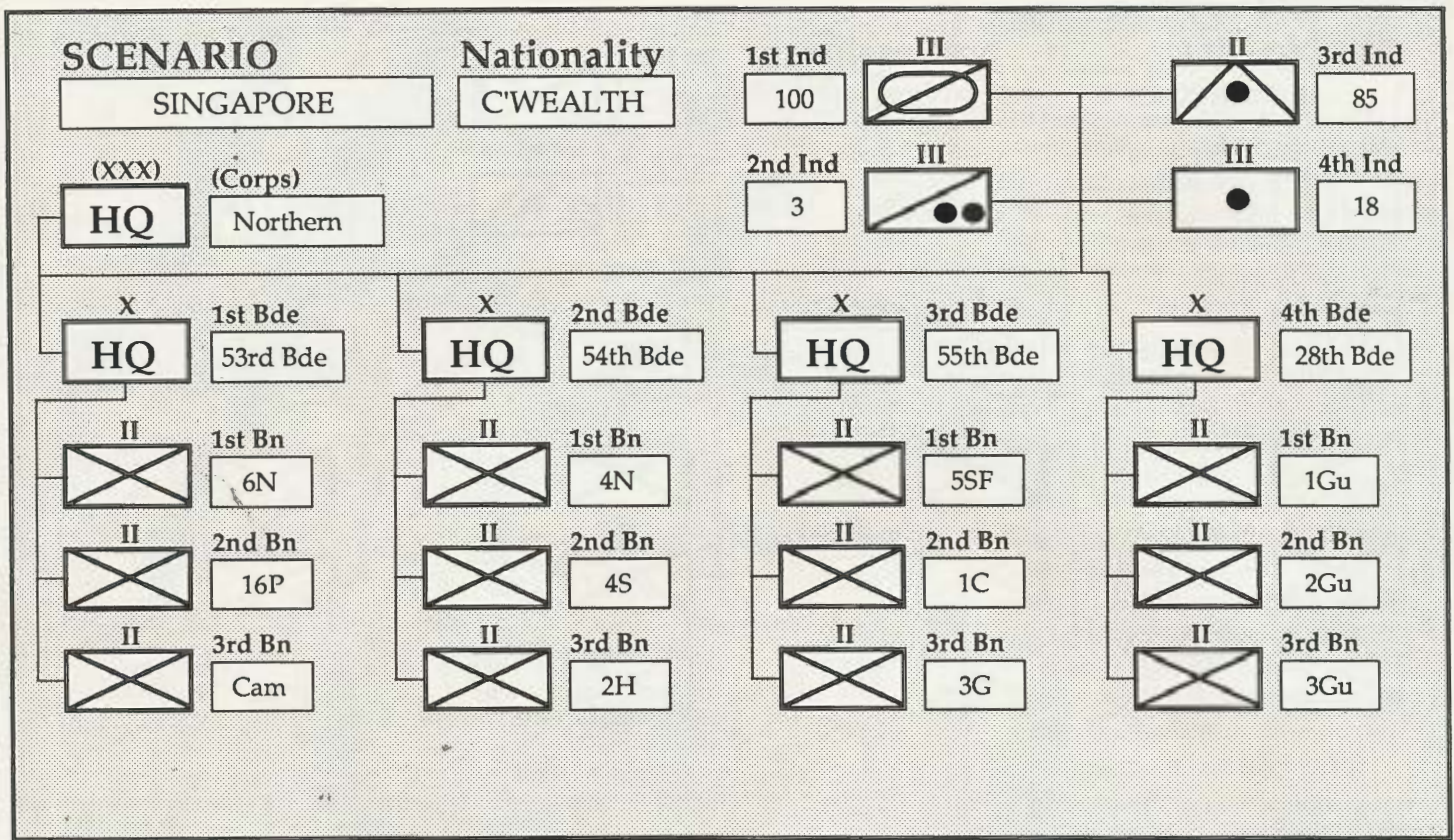


HEADQUARTERS DATA

FORMATION	HQ	(XXX) HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	Western	22nd Bde	27th Bde	44In Bde	1Mal Bde
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	Garrison
HQ ADMIN	0-7	3	3	3	2	2
LEADERSHIP	0-7	6	5	6	3	3
HQ SUPPLY	0-7	4	7	7	7	7
BRITTLE	0-1	0	0	0	1	1
MOVEMENT	0-31	3	N/A	N/A	N/A	N/A
ARRIVAL	0-99	0	N/A	N/A	N/A	N/A
LOCATION	(x,y)	5,9	N/A	N/A	N/A	N/A

BATTALION DATA

FORMATION	II/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	18	19	20		26	29	30		1P	8P	14P		2L	1M			4MG	15	215	CD
LOCATION	(x,y)	4,5	3,6	6,4		8,5	10,6	9,4		3,11	3,9	5,11		12,14	11,12			8,7	8,8	10,7	1,10
CLASS	0-13	0	0	0		0	0	0		0	0	0		0	0			4	9	13	13
MODE	0-3	0	0	0		0	0	0		0	0	0		0	0			0	0	0	0
EQUIPM'T	0-31	1	1	1		1	1	1		1	1	1		1	1			13	12	10	19
MOVEMENT	0-31	4	4	4		4	4	4		4	4	4		4	3			5	5	3	0
ARRIVAL	0-99	0	0	0		0	0	0		0	0	0		0	0			0	0	0	0
MAX STREN.	0-15	9	9	9		9	9	9		9	9	9		9	9			6	6	4	4
INIT. STREN.	0-15	7	7	8		7	9	7		9	9	9		9	6			6	6	4	4
RATING	0-15	8	8	8		8	8	8		7	7	7		8	5			10	8	10	11
RANGE	0-15	0	0	0		0	0	0		0	0	0		0	0			1	0	8	12
FATIGUE	0-7	7	7	7		7	7	7		7	7	7		7	7			7	7	7	7
EXPERIENCE	0-7	3	2	5		4	2	5		2	2	2		5	2			5	4	4	3
ATTACHM'T	0-4	N/A	N/A	N/A		N/A	N/A	N/A		N/A	N/A	N/A		N/A	N/A			2	2	2	1

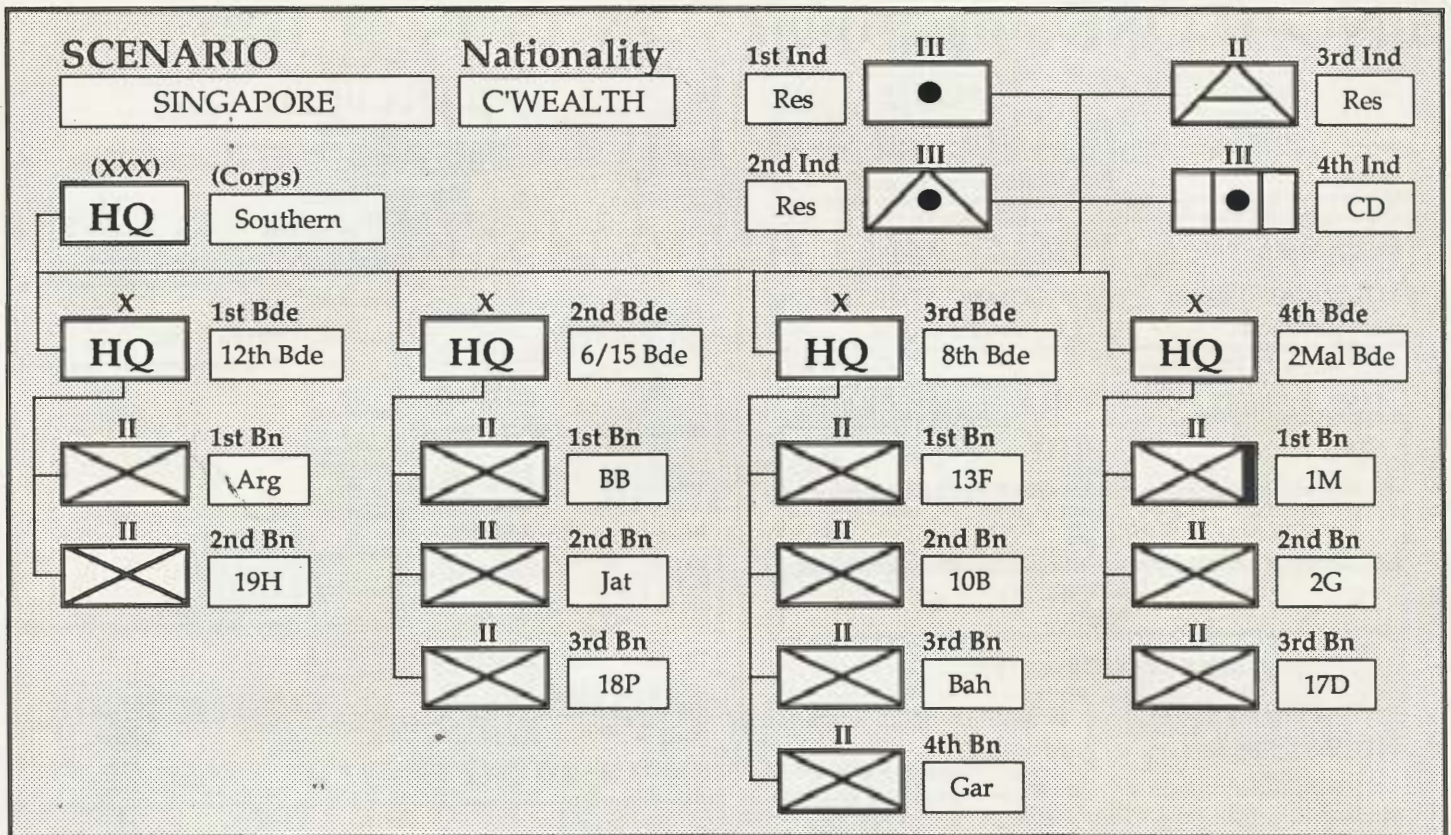


HEADQUARTERS DATA

FORMATION	HQ	(XXX) HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	Northern	53rd Bde	54th Bde	55th Bde	28th Bde
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	Infantry
HQ ADMIN	0-7	3	3	3	3	2
LEADERSHIP	0-7	2	4	4	2	2
HQ SUPPLY	0-7	4	7	7	7	7
BRITTLE	0-1	0	0	0	0	1
MOVEMENT	0-31	3	N/A	N/A	N/A	N/A
ARRIVAL	0-99	0	N/A	N/A	N/A	N/A
LOCATION	(x,y)	10,10	N/A	N/A	N/A	N/A

BATTALION DATA

FORMATION	II/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	6N	16P	Cam		4N	4S	2H		5SF	1C	3G		1Gu	2Gu	3Gu		100	3	85	18
LOCATION	(x,y)	14,4	13,2	14,3		21,8	20,8	22,9		19,6	15,5	17,5		11,3	10,4	11,4		10,9	11,5	10,5	12,7
CLASS	0-13	0	0	0		0	0	0		0	0	0		0	0	0		11	6	9	13
MODE	0-3	0	0	0		0	0	0		0	0	0		0	0	0		0	0	0	0
EQUIPM'T	0-31	1	1	1		1	1	1		1	1	1		1	1	1		14	16	12	10
MOVEMENT	0-31	4	4	4		4	4	4		4	4	4		4	4	4		7	8	5	3
ARRIVAL	0-99	0	0	0		0	0	0		0	0	0		0	0	0		0	0	0	0
MAX STREN.	0-15	9	9	9		9	9	9		9	9	9		9	9	9		3	3	6	9
INIT. STREN.	0-15	6	7	6		9	9	9		9	9	9		5	6	6		3	3	4	7
RATING	0-15	7	7	7		8	8	8		8	8	8		6	6	6		7	6	8	9
RANGE	0-15	0	0	0		0	0	0		0	0	0		0	0	0		1	0	0	8
FATIGUE	0-7	7	7	7		7	7	7		7	7	7		7	7	7		7	7	7	7
EXPERIENCE	0-7	4	4	4		3	3	3		3	3	3		4	4	4		3	3	4	3
ATTACHM'T	0-4	N/A	N/A	N/A		N/A	N/A	N/A		N/A	N/A	N/A		N/A	N/A	N/A		1	1	1	1



HEADQUARTERS DATA

FORMATION	HQ	(XXX) HQ	1/BDE	2/BDE	3/BDE	4/BDE
HQ I.D.	[8]	Southern	12th Bde	6/15 Bde	8th Bde	2Mal Bde
UNIT TYPE	[8]	Infantry	Infantry	Infantry	Infantry	Infantry
HQ ADMIN	0-7	2	2	2	2	3
LEADERSHIP	0-7	1	1	4	4	3
HQ SUPPLY	0-7	4	7	7	7	7
BRITTLE	0-1	0	0	1	1	0
MOVEMENT	0-31	2	N/A	N/A	N/A	N/A
ARRIVAL	0-99	0	N/A	N/A	N/A	N/A
LOCATION	(x,y)	14,14	N/A	N/A	N/A	N/A

BATTALION DATA

FORMATION	II/X	1/1	2/1	3/1	4/1	1/2	2/2	3/2	4/2	1/3	2/3	3/3	4/3	1/4	2/4	3/4	4/4	1/-	2/-	3/-	4/-
UNIT I.D.	[3]	Arg	19H			BB	Jat	18P		13F	10B	Bah	Gar	1M	2G	17D		Res	Res	Res	CD
LOCATION	(x,y)	13,12	14,12			14,9	13,8	14,8		12,8	11,9	11,8	12,9	19,11	22,11	24,9		11,10	11,12	12,11	15,14
CLASS	0-13	0	0			0	0	0		0	0	0	0	4	0	0		13	9	8	13
MODE	0-3	0	0			0	0	0		0	0	0	0	0	0	0		0	0	0	0
EQUIPM'T	0-31	1	1			1	1	1		1	1	1	1	13	1	1		17	12	15	19
MOVEMENT	0-31	4	4			4	4	4		4	4	4	4	4	4	4		2	5	5	0
ARRIVAL	0-99	0	0			0	0	0		0	0	0	0	0	0	0		0	0	0	0
MAX STREN.	0-15	9	9			9	9	9		9	9	9	9	9	9	9		6	6	6	9
INIT. STREN.	0-15	6	6			5	5	5		6	5	6	6	7	8	8		6	4	5	9
RATING	0-15	7	7			7	7	7		7	7	7	7	10	8	7		9	8	7	12
RANGE	0-15	0	0			0	0	0		0	0	0	0	1	0	0		10	1	0	12
FATIGUE	0-7	7	7			7	7	7		7	7	7	7	7	7	7		7	7	7	7
EXPERIENCE	0-7	4	3			5	3	3		4	4	3	4	4	4	4		4	3	3	3
ATTACHM'T	0-4	N/A	N/A			N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A		0	0	0	1

SINGAPORE - Briefing

AXIS			ALLIED		
SIDE [16] JAPAN			SIDE [16] COMMONWEALTH		
CORPS [16] 25th Army			CORPS [16] Malaya Command		
COMMANDER [16] Gen. Yamashita			COMMANDER [16] Lt-Gen. Percival		
DAY	NIGHT	SUPPORT	DAY	NIGHT	
15	0	QUANTITY (0-99)	5	0	
1	0	RELIABILITY (0-3)	0	0	
8	0	RATING (0-15)	6	0	
AIR SUPERIORITY (0-7)					
STATUS =		1	STRONG AXIS		
RELIABILITY =		1	ERRATIC		

SCENARIO [16] Singapore	
BRIEFING [26] Imperial Disaster Feb 8th - 15th, 1942	
(0-3)	START = 3
(1-31)	DATE = 8
(1-12)	MONTH = 2
(0-99)	YEAR = 42
(0-20)	CENTURY = 19
(1-16)	LENGTH = 8
(0-3)	WEATHER = 3
(0-7)	FORECAST = 2
(0-7)	CLIMATE = 2
(0-31)	MECH MIN = 6
BRITTLINESS	
(0-9)	AXIS = 00 %
(0-9)	ALLIED = 70 %
NIGHT CAPABLE	
(0-1)	AXIS = 1
(0-1)	ALLIED = 0

nite
8th FEB 1942

CLEAR
BUILDING
TROPICAL

SINGAPORE - Terrain Effects Chart

TERRAIN CODE (T0-T15)	TERRAIN NAME [10]	TERRAIN COSTS PER HEX		ATTACK EFFECTS		
		MECH (0-31)	NON-MECH (0-31)	ARM (0-7)	ART (0-7)	INF (0-7)
T0	Ocean	0	0	0	0	0
T1	Swamp	6	6	5	5	6
T2	Farmland	3	2	6	6	6
T3	Jungle	6	4	4	3	5
T4	Mountains	8	4	3	2	4
T5	Rough	4	2	4	5	4
T6	Airbase	3	2	6	6	6
T7	Swamp (P)	0	0	0	0	0
T8	Farmland (P)	0	0	0	0	0
T9	-	-	-	-	-	-
T10	-	-	-	-	-	-
T11	-	-	-	-	-	-
T12	-	-	-	-	-	-
T13	-	-	-	-	-	-
T14	-	-	-	-	-	-
T15	-	-	-	-	-	-
-	ROAD	1	1	N.A.	N.A.	N.A.
-	FORT	N.A.	N.A.	3	3	4
-	CITY	N.A.	N.A.	5	4	4
-	BRIDGE	1	1	5	7	5
-	RIVER	N.A.	4	4	7	4

SINGAPORE - Objectives & Misc. Factors

I.D.	Name [11]	Map Loc [x,y]	Div. (0-3)	Def. (0-1)	Start (1-99)	End (1-99)	Pts/T (0-30)	Pts/E (0-255)
1(AX)	Pasir Laba	1,10	2	0	1	31	1	5
2(AX)	Jurong	5,9	2	0	1	31	2	5
3(AX)	Tengah AB	6,7	1	0	1	31	2	5
4(AX)	Kranji	9,4	3	0	1	31	1	5
5(AX)	Mandai	9,7	1	0	1	31	2	5
6(AX)	Timah	10,9	2	0	1	31	3	10
7(AX)	Naval Base	13,2	3	0	1	31	1	5
8(AX)	Sembawang	13,4	3	0	1	31	1	5
9(AX)	Singapore	14,14	1	0	1	31	5	25
10(AX)	Thompson	15,9	0	0	1	31	3	10
11(AX)	Seletar AB	16,6	3	0	1	31	2	5
12(AX)	Changi	24,7	3	0	1	31	3	10
1(AL)	Pasir Laba	1,10	1	0	1	31	3	10
2(AL)	Jurong	5,9	1	0	1	31	2	10
3(AL)	Tengah AB	6,7	1	0	1	31	2	10
4(AL)	Kranji	9,4	2	0	1	31	2	10
5(AL)	Mandai	9,7	2	0	1	31	2	10
6(AL)	Timah	10,9	1	0	1	31	2	10
7(AL)	Naval Base	13,2	2	0	1	31	1	10
8(AL)	Sembawang	13,4	0	0	1	31	1	10
9(AL)	Singapore	14,14	3	1	1	31	2	50
10(AL)	Thompson	15,9	0	0	1	31	1	10
11(AL)	Seletar AB	16,6	0	0	1	31	1	10
12(AL)	Changi	24,7	0	0	1	31	1	10

**ADJACENT ENEMY
HEX PENALTY (AXIS/ALLIED)
(0-15)**

1st Hex =	<input type="text" value="0"/> <input type="text" value="1"/>	4th Hex =	<input type="text" value="2"/> <input type="text" value="3"/>
2nd Hex =	<input type="text" value="0"/> <input type="text" value="2"/>	5th Hex =	<input type="text" value="2"/> <input type="text" value="3"/>
3rd Hex =	<input type="text" value="1"/> <input type="text" value="3"/>	6th Hex =	<input type="text" value="2"/> <input type="text" value="3"/>

**VICTORY POINTS PER
STRENGTH POINT
ELIM. (0-15)**

	MECH	NON MECH
AXIS	<input type="text" value="3"/>	<input type="text" value="2"/>
ALLIED	<input type="text" value="1"/>	<input type="text" value="1"/>

**MAP
SIZE**

ACROSS (0-2)	<input type="text" value="1"/>
DOWN (0-3)	<input type="text" value="2"/>

Gregor Whiley Reviews Dynamix' WW1 Aerial Combat Simulator

Just occasionally, the incredibly hardworking personnel of SSG get to lift their heads from the grindstone, and survey some other areas of the gaming world. From our vantage point, the most crowded area seems to be that of flight simulations. The world's entire arsenal of high tech warplanes has been simulated down to the last pixel, including some that have yet to fly.

Faced with this overcrowding, game companies turned, in a magnificent display of herd instinct, to Historical Air Combat, now a distinct genre in its own right. A bunch of WWI air combat games came out at the same time, and the game that caught the interest of resident SSG flying ace Gregor Whiley was Red Baron.

Red Baron comes with a lavish, superbly produced manual, only about a quarter of which deals with the mechanics of game play. The rest of the book is concerned with WWI aviation history, personalities and tactics, and is very readable. Also notable are the maps of the various front line areas that you fly over.

The flight simulation field is basically split between air combat games, and air combat simulators. Air combat games emphasise ease of play and combat, and experienced users can usually rack up big kills and scores. Their *Finest Hour* is an air combat game, *Falcon* is a highly technical combat simulation.

Red Baron is an interesting attempt at having both ways. There are eleven different parameters, like allowing midair collisions, which can be turned on or off at will. There are also three different settings for both the combat level and the flight model. If everything is turned on, you get a very justified 100% difficulty rating, which also acts as a score modifier. With easy combat and flight chosen, and a few of the nastier options turned off, the game becomes much easier, and beginner pilots stand a chance of survival.

Nevertheless, learning to fly Red Baron still takes a while. The aircraft of that time were fragile and underpowered, a fact faithfully reflected in RB. In the expert flight model, staying alive is quite tricky. Stalls are serious affairs, while spins are simply frightening, as your aircraft hurtles out of control towards the ground. Worse still, various aircraft, usually German, have a tendency to shed their wings in steep dives. While you can recover from a spin, wing loss definitely provokes that sinking feeling.

If you persevere, the result is highly rewarding. Each plane feels quite different. Combat is tough and unforgiving, and the dogfights are tense, confused and exciting affairs.

RB has a variety of single and historical missions, which serve as an excellent introductory experience. You can choose to fly for either side, and edit a number of the mission parameters. This can help the beginner. For example, in the *Dogfight an Ace* mission, you can give the odious Goering something fairly harmless like an Albatross D.II, while you outfit yourself with the rather snappy Sopwith Snipe. Later on, you'll be able to deal with him on equal terms.

The real meat of the game is to be found in flying a campaign. You choose your side and the time of your enlistment, and set off to survive the war. You then get a series of missions, basically replays of the types available in the single mission section, thrown at you until either you die or reach honourable retirement at the end of the war. Enlisting early in the war, in the German Air Service, you are handed a Fokker Eindecker to fly. You won't feel terribly happy about this, until you fly its opposition, the Morane-Saulnier Bullet, which has all the flight characteristics of a bullet, except the speed. Thankfully, any two seaters you come up against are even more feeble than you are.

As you proceed in your career, your kills and score should mount. As time passes, both sides introduce new aircraft. Unfortunately for you, no matter what side you fly for, this process is not synchronised. You will inevitably find that the other side will be issued with spiffy new types that vastly outperform yours. Your side will not see what all the fuss is about, and politely request you to soldier on in the now obsolescent crate you've always flown.

These new aircraft really do make a difference. Each new aircraft is generally faster in climb, dive and level flight than its predecessors, meaning that the enemy has three different ways of getting away from you. Often they are more manoeuvrable to boot, making them even more formidable.

There are a couple of ways to deal with the problem. Firstly, advance to the rank of Captain or Rittmeister as soon as possible, thus getting first pick of any new aircraft. Lesser mortals below this rank struggle on until the new types become generally available for squadron service, which might mean a few more months of flying hell. Being wounded, or a POW, is also good for an honourable two to three months out of the fray.

The Germans have a couple of rough periods. The Eindeckers are retained for far too long, and you can still be flying them in late 1916, when the Al-

lies have Sopwith Pups and Nieuport 17s, and memories of your superiority over the "Bullets" have long faded. The Albatross D.V also has a bad time with Camels and S.E.5s, until the arrival of the Dr.1 triplane.

The Allies are also asked to bat on sticky wickets from time to time. Flying the aforementioned "Bullet" is very character forming. Also, the months of February, March and the infamous 'Bloody April' of 1917 are good times to avoid, as the newly arrived Albatross D.III's sweep all before them. There is no provision in the game for becoming an instructor pilot, or doing a tour selling war bonds, but if there were, this would be a great time to exercise the option. May and June 1917 see the arrival of the S.E.5a and the Camel, and after that the Allies have nothing to fear from inferior machinery.

The Dr.1, as flown by the Red Baron himself, is a delight to fly, and will get you onto the tail of another plane quicker than anything else. However its slow speed makes the Dr. 1 something of an all or nothing proposition. Either you shoot them down, or they get you, as the plane is too slow for easy getaways.

One of the great achievements of Red Baron is that it has put the flight back into flight simulators. In reality, any pilot with pretensions to surviving more than a few weeks became a very good judge of combat situations. If they developed to his disadvantage, he would have to turn for home. Even Biggles ran for his life from superior forces, especially if he was on his own.

If you are playing RB as a game, it's very easy to throw yourself into every combat, in the sure and certain knowledge that resurrection is only a backup away. If wounded or outnumbered, you 'bravely' fight on in the face of impossible odds.

To my mind, the real pleasure in RB comes in trying to last the entire war without dying, or resorting to backups. Suddenly, there is a lot more at stake in any combat, and those impossible odds don't look so tempting. All this requires is a certain amount of savvy

and an entirely authentic cynicism towards the war effort.

Flak (or Archie as it was known) has an uncanny way of ventilating your aircraft on balloon busting missions. It happily fires right into the middle of dogfights, and it never hits your opponent, only you. (This from a service on both sides that couldn't hit a moored Zeppelin at fifty feet). The best way of dealing with balloons is to let your comrades attack the balloons, while you go after the defending planes. You can do the heroics later, when flak damage won't be such a handicap.

The same goes for the bigger bombers of the late war period, who have a very lethal flexible machine gun coverage. Let the Fokker fodder handle them, get the escorts, and then, if you feel you really must try to stop some insignificant ground target being bombed, choose only high speed, high deflection attacks.

Lastly, the ability to count in dogfights is essential to survival. I have found that it is possible to handle 3 or sometimes 4 opponents on your own in a dogfight. Numbers beyond that will simply overwhelm you. If things get that bad, you must forget the Boys Own stuff and simply run for your life. After all, you probably joined the air service in the first place to get away from the senseless slaughter and sacrifice of trench warfare.

I must add a final point about the cynical approach to air combat, which the program itself employs. As your career progresses, you begin to receive challenges from other aces. Picking up the flying gauntlet is not compulsory, but the fights are the stuff of some ripping yarns. Your opponent will be very good, but there will only be one of him, and you should prevail in a fair fight. However, a certain RFC pilot, 'Mick' Mannock, who one reference book called a 'ranting, proselyting socialist' obviously skimmed on his reading of



Taking a Well Earned Drink!

SSG's very own flying ace Gregor von White, relaxes between missions

English boy's classics. He challenges you to duel, and when you turn up at the appointed hour, you find that the ruthless swine has brought a couple of friends along. Obviously his socialist beliefs prevented him from playing cricket and learning about fair play. The trepidation that you feel counting the opposing aircraft is matched only by the great satisfaction obtained by shooting all the unsporting bastards down. It's a lovely touch in a delightful game.

There are a few caveats about the game. The enemy always appears directly in front of you, and normally at the same height. It would be much more exciting, perhaps as an option, if they could appear from anywhere. This would combat the fact that the missions do seem the same after a lot of playing.

The most annoying flaw is the midair collisions option. I don't believe it is possible to get through the war without one of your own side flying straight into you, let alone an opponent on an opposite tack in a dogfight. On the other hand, if there is no collision detection, it allows a very cavalier style of dogfighting, where you can fly straight through your opponent. There must be a middle ground somewhere.

Red Baron is an air combat simulator that does a superb job of bringing you a very real picture of WWI air combat. It is highly recommended for all those pilots growing somewhat blasé with the single-handed destruction of entire air forces in air combat games. ♦

EDITOR'S... (from p. 3)

Declining demand (or abandonment by their manufacturer) makes it no longer practicable for us to cater for them. Reluctantly, from Issue 21 onwards, there will be no disks made available for these machines. If any subscriber has any credit extending past this deadline, we will be only too happy to make a refund on a pro-rata basis.

Of course, if you wish to switch your disk subscription to IBM, Macintosh or Amiga, just write to us and we'll make the change immediately. It doesn't cost anything.

JUST RELEASED

Since the publication of Issue 16, we have released *Decisive Battles Vol II* (Macintosh), *Panzer Battles* (Amiga) *MacArthur's War* (IBM), *Gold of the Americas* (IIGS) and *Warlords* (Macintosh).

ABOUT TO BE RELEASED

We hope to release the following titles in the upcoming months.

IBM - *Carriers at War*

Macintosh - *MacArthur's War, Carriers at War*

Amiga - *Rommel, Decisive Battles (Vol I), Carriers at War*

IIGS - *Rommel*

ONLINE UPDATE

We have been very pleased with the response to our online connections, especially on CompuServe. We've had long discussions with end users, been able to offer immediate product support and also let people know about new SSG products.

CompuServe libraries contain scenarios, most created by end users and also demo versions of our games for downloading. We log on about every two days, so response time is much quicker than sending a letter. If you're already

online, why don't you drop us a line. If you're not, think about it. Apart from being worthwhile it's also great fun.

CompuServe: Strategic Studies Group - 72040, 34

Applelink: Strategic Studies Group - AUST0161

GENie: SSG

LETTERS... (from p. 20)

defend there. Examples might be orders to move to and defend a hill or river line. I can usually manage to get my regiments moved to the terrain I want and get them deployed, but the game mechanics do not make this easy. The regiments also tend to spread out beyond the bounds of the feature I wish them to defend.

Second, when I pick the option for the regiment to approach the enemy, it is very irritating when the first brigade contacts the enemy and the computer defaults to defend. I would like the choice to default to support or perhaps to probe. When the brigades defend they all wander off looking for good terrain instead of massing on the enemy in preparation for an attack. Why do they think I sent them there? In a tight situation they may not have the opportunity to regroup unless I can pull them off the line by reserving them. This usually causes unacceptable delay.

Third, I would like to be able to direct artillery to perform counter battery fire. I have noticed that artillery brigades well behind enemy lines do suffer minor combat results which I assume is meant to represent counter battery fire. It would sometimes be helpful to be able to direct it.

Fourth, I would like to be able to use air power in ways other than directly in support of attack and defence. This idea came to mind when I found myself in situations where no enemy were in contact and I had to waste OBS. Couldn't planes be used to perform other functions such as interdicting enemy movement? I realise OBS can

represent several different types of off board support including ship guns.

Fifth, I would like to see weather effects on combat. I haven't noticed any affect if weather is already programmed into the game.

Those are the suggestions I have for now. Again I want to say I really enjoy playing *Panzer Battles*. I plan to purchase *Halls of Montezuma* and I am very excited about *Decisive Battles of the American Civil War: Vol One*.

Sincerely

Gregory S. Smith

Daly City, CA

USA

MALAYA... (from p. 37)

enhancement values are 0. The General Enhancement values are 6 (Axis) and 2 (Allied). AII/C64 users may wish to experiment with play balance by altering the general enhancement values. Note that you will need the *Panzer Battles* master disk or the complimentary *Battlefront System* master disk given out to C64 disk subscribers with Issue 14.

Finally, save again and the scenario is ready to play.

NOTES FOR IBM USERS

IBM users with CGA, MCGA, Tandy or Hercules graphics, or using the first edition of *Halls of Montezuma*, can create the scenario using the advice given above.

IBM users with EGA or VGA cards and the *Rommel* (or subsequent) master disk have access to our "full-map" graphic routines.

For a detailed description of the procedure, read the article in Issue 14.

ERROR... NO SPACE

There will be some belated variants for the *Malaya* and *Singapore* scenarios in the next issue of *Run 5*. ♦

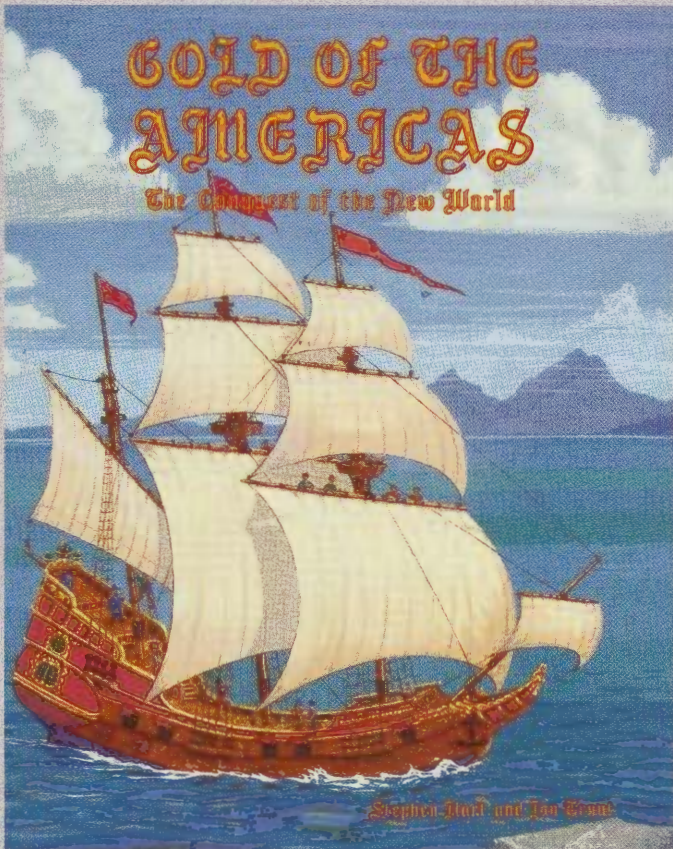
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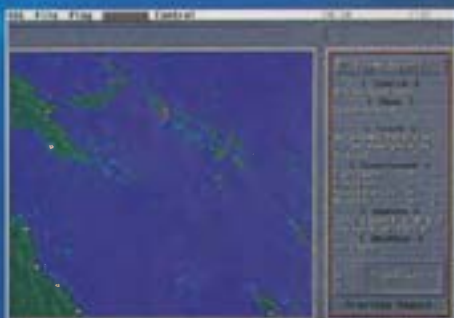
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