

Simulation is the name of the game. *Fleet Tactical Command* is a QL naval simulation from Di-Ren. You control a fleet of 16 modern ships in an ocean a thousand miles on a side. Vessels range from battleships to tankers. Each has their own properties like maximum speed, fuel consumption, weaponry and equipment.

The daytime screen shows a 180 degree view in any direction from any ship, with instruments alongside. Jetties and other ships appear in wire-frame 3D, and bob up and down with the animated waves. At night you must rely on radar or sonar, with range adjustable from four to 32 miles.

Other displays show the ship's position, type, depth, fuel and the calendar, which runs 30 to 100 times faster than real life, a rate calculated to keep players just short of panic. Alarms sound at key moments; you can silence them by typing CANCEL ALARM or using the RS-232 link, which inhibits QL sound.

This is a simulation, rather than an arcade game, although it gets quite frantic. My QL redraws the screen about 80 times a minute; this rate varies with network activity, but keeps up well even if the seas are congested. A second task accepts commands at any time and shows a steady stream of Tannoy messages and signals from other ships. You may divert signals, status or damage reports to any printer.

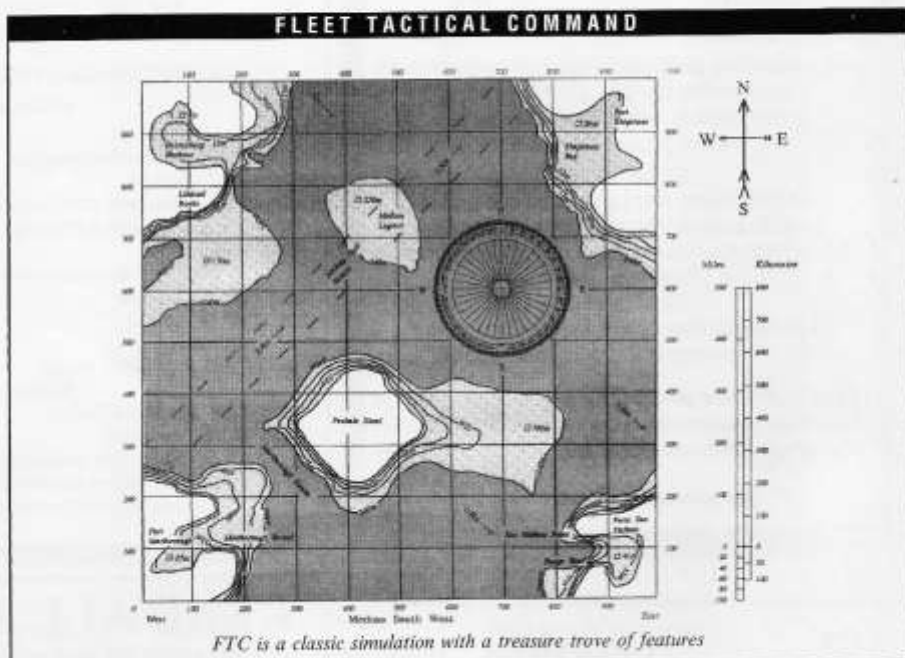
The default fleet includes two each of submarines, frigates, destroyers, cruisers, battleships, tankers, mine-layers and supply ships. You can mix your own fleet, and may opt for 14 mine-layers if you're feeling really defensive. *FTC* insists on at least one supply ship and one tanker.

The limit of 16 vessels per side is not restrictive once you get to grips with the game. Ships are very individual; each has a unique and realistic range of commands, systems and compartments. You play by typing text commands, abbreviations or keyboard shortcuts; for instance, STEER sets a course in degrees, while the arrow keys move the helm to Port or Starboard. Ctrl-F is shorthand for 'FIGHT FIRE IN'; Ctrl-Up sets emergency FULL AHEAD, and so on.

The hundred-odd commands include NEGOTIATE, for approaching neutral ports, REFIT, REPEL BOARDERS, PERISCOPE DEPTH and DIVE. You can enter questions: for instance STARTEVAPORATORS? might

Sinclair Scene

Timothy Green takes a Quantum Leap and ends up lost at sea



prompt the reply "Evaporators not running; no power aft; main generator damaged." You might respond: START AUX GENERATOR, LAY EMERGENCY CABLES and start repairs. The crew will get thirsty unless the evaporators are fixed before the fresh water tanks empty. Meanwhile, other ships may be under attack...

Valid commands depend on the 'state of readiness' of your ships. A ship at Harbour Stations is a sitting duck. You need to be at Cruising Stations to move the ship. Defence Stations bring the duty signalman to the bridge, so you can send messages or orders to other ships without delay. Action Stations seals the watertight doors and hatches, and calls up the weapons. Commands take varying amounts of time, and crew fatigue may lead to breakdowns or sabotage.

Each ship has a computer that predicts the position and bearing of allies, and enemies within range. Weapons include torpedos, guns, depth charges, ABM interceptors

and tactical nuclear missiles with a range of 250 miles. You can't use these if you forget the tedious Nuclear Enable code generated at the start of the game. Some ships have radar-guided Sea Strike missiles; these are no Exocets, but you get plenty, and damage soon mounts up. The best defence is Chaff, which disturbs the radar.

If your ship is damaged you can pump out compartments, fight fires, repair and restart machines. Typical ships have about 20 main compartments, two generators, three power switchboards and all sorts of equipment. A diagram shows how power is routed through the ship. If a compartment is hit you may need to lay cables to keep the rest of the ship going. Most faults are repairable, unless you run aground at low tide, but the speed of repairs depends on the operational capability of the ship, which in turn depends on supply levels, fatigue and the state of readiness.

The package is daunting. The A4 box is two inches thick, stuffed with 18 two-colour charts, a pair

of manuals, cartridges or disks, eight scenario logs, compasses, mapping pins, protractors, rulers, pencils and erasers for big mistakes. The 72-page manuals include fascinating strategic notes, ship and weapon details, advice on tides, currents and navigation. You also receive hints from the *Fleet Tactical Command Club*, and pages of updates. Di-Ren can justly claim to have out-Infocom'ed the US masters of bundled trivia. What's more, *FTC* goodies are useful as you play the game.

Getting up steam

It might seem that *Fleet Tactical Command* is unplayably complex, and that might be true if this were a board game, but *FTC* is computer-moderated, so all the book-keeping and recording is done for you. The parts fit together so well that you start to get the hang of it almost immediately. You can save games on tape or disk, as a full two-player battle might take many hours, but a single player can have lots of fun within a few minutes of loading.

I have already enjoyed ramming other ships, trying to refuel at sea, testing the nuclear alarms and seeing how many depth charges it takes to sink myself. I got 36 away before the launcher caught fire, among other things, within 14 minutes of loading the game. I then spent two days, game time, parking a big cruiser in a shallow water port.

FTC is addictive, as long as you don't feel guilty about annoying your crews. You soon realise it helps to WEIGH ANCHOR before setting off, and learn to plan your journeys around the available fuel and supplies! It's great fun trying to rescue stricken ships and tackling other problems as they arise.

Fleet Tactical Command runs on one or two computers, linked via network or serial ports. It just fits in a 128K machine, without toolkits. It costs a hefty £49.95, but for once it's worth it. QL customers are promised a free upgrade with a modem option, and a compatible MsDos version is being developed. Apparently *FTC* suits the ST QL emulator, but it crashes *Argos 6.4.1* on our Thor.

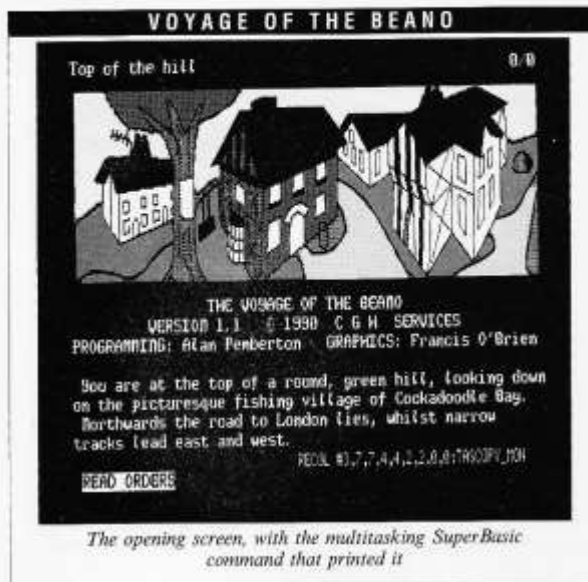
It's impossible to do justice to *Fleet Tactical Command* in a short review. It is a classic simulation, akin to *Elite* or *Carrier Command*, but more detailed than either. I'm very impressed, and shall report again when I find an enemy admirer!

Music Writer

Music Writer is a Spectrum 128 program intended to help beginners learn to read classical musical notation. Our copy arrived on tape early in June, but did not work. Despite a dozen attempts, our Amstrad Plus Three stubbornly refused to load the supplied cassette. I can read the files with a 48K Spectrum, which has far superior loading hardware, but they won't run as the program needs the extra memory of a 128K Spectrum.

The main problem seems to be the original recording, which runs at uneven speed, with glitches in the header and data tones, plus odd clicks and swelling Plus Three engine noise between tracks. There is no spare copy. Frankly, having listened to the recording, I'm amazed the 48K Spectrum can make any sense of it at all.

Some of the fault here lies with Amstrad, which made a terrible mess of the previously tolerant Spectrum cassette system when it revamped Sinclair's custom chips to make the Plus Three and Plus



2A. The revised circuit includes a vicious automatic level controller which amplifies residual circuit noise to high levels, and mixes the unwanted result into the tape output!

To make things worse, the Plus Three is more sensitive to input volume fluctuations than Sinclair Spectrums, and its processor does not run at quite the same speed as earlier models. These effects combine to make tape loading erratic, and saving even worse. For this reason, many established software houses create their tape files on a 48K Spectrum, even if they are intended to load into a 128. I shall return to *Music Writer* once I get a copy I can load.

Voyage of the Beano

Last month's loading problem stalled the new QL adventure *Voyage of the Beano*. A replacement disk arrived from CGH Services within a few days.

Beano was written by Alan Pemberton of the Scottish QL Users' Group. Alan wrote *Starplod*, *Tower of Valagon* and *Adventure Playtime*, so he has a formidable reputation as an adventurer. *Voyage of the Beano* is his first release for the expanded QL, and needs at least 256K Ram.

Beano is an adventure in text and graphics, vaguely set in Elizabethan times, like *Blockadder 2*. The Queen was jolly impressed when lowly deckhand JD Hogwash captured a deserted Spanish galleon, more by luck than judgement. She elevated him to Captain of HMS Beano and sent him to sea, with instructions to "Bring back

lots of gold".

Naturally, it's not that simple. The mission involves lots of other characters, controlled by the computer, and they all have their own ideas. Your first problem is crewing the ship. As you wander round the town and coastline, you find a few people willing to set sail, but they're an odd lot. It's up to you to cobble together a plan, pressgang a full crew, and sail west in search of Spaniards, pirates and gold.

The clichéd scenario did not exactly fill me with enthusiasm when first I read it, but the adventure drew me in as soon as I started to play. The MODE 4 text is entertaining and, for once, easy to read. The puzzles are original and fun, but not too difficult. As with Pemberton's other adventures, *Beano* rewards experimentation, rather than frustration. You are not forced into one right way of doing things; even silly ideas provoke an amusing response.

The main game is 124K of multitasking Basic compiled with *Q-Lib*. A cursor is always displayed, and REFRESH redraws the screen, so *Beano* multitasks happily on any QL. It also runs on our Thor XVI, although the BEEP emulator has trouble recreating the Hornpipe that plays after loading! The graphics use 350K of disk space, so they are not available on the cartridge version.

The A5 manual is short, clear and helpful. Valid commands are fairly standard for a text adventure. The parser recognises shorthand words like ALL and IT. You can string commands together with

AND or THEN. It will probably take several sittings to solve the game - I have completed about 30 percent, after 10 or a dozen hours of play - so you can save your position to a buffer in memory, or a named file on disk or cartridge.

You move inside the ship by specifying compass points, invariant as the ship moves, or UP, DOWN, FORE and AFT, but you must type SAIL before directions if you want the whole ship to move. HELP is simple but useful. It tells you whether you're doing OK, or would be better off starting again. Other commands control the graphics and printer. PRON directs text to the printer as well as the screen, so you can review your progress later; output can be VERBOSE or BRIEF.

The game includes at least 70 locations, lots of computer-moderated characters, and a couple of dozen MODE 4 pictures - which make good use of stippled colour. Sometimes the graphics change if you wait for something to happen. Pictures load within a couple of seconds, but reduce the space for text onscreen. Graphics slow play once you know your way around, so GROFF and GRON turn them off and on.

You won't get far in this game without help from other characters. For instance you can TELL named characters to STAY or FOLLOW, ASK advice, or request them to do things you can't manage on your own. They are simple souls, easily confused, but can be very helpful once you know their talents.

In general, *Beano* seems well designed and tested, but the parser can be misleading if you use the wrong grammar when taking or dropping. *Beano* flatly says 'you can't do that'. Another small irritation in version 1.1 affects the continuous display of the number of commands issued and points scored. RESTORE does not clear this top line display, so it may read 546/0 if you reload a saved game and it prints 46/0 over the old score, say 50/10.

These are minor criticisms; overall *Voyage of the Beano* is a lot of fun. It costs £11 on disk, £13.40 on two cartridges or £7 if you supply the tapes. It's well worth it if you have a few hours to relax with an expanded QL.

Beta Dos

Dr Andy Wright has developed a new system file for the Spectrum Plus D interface, which is marketed by Datel. BetaDos adds features and makes the Plus D faster and more reliable. It takes no user memory, and costs just

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under a tenner.

The original G+Dos works but can be slow, has a few bugs, and allows no more than 80 files on each disk, as I reported in *Shopper* 23. BetaDos catalogues allow up to 780 files; you choose the number of catalogue tracks, from 4 to 39, when you format the disk. MGT systems expect four catalogue tracks.

COPY now handles all file types and sizes, and does not clobber the current Basic program. The new variant SAVE OVER automatically overwrites existing files. Snapshot files may be automatically compressed and expanded, saving disk space (see *Shopper* 29).

Programmers will relish the new file routines. G+Dos lets you direct INPUT and PRINT to a file, but not much else. BetaDos functions tell you the size of an open file, the file pointer position (in bytes, 0-795,599) and whether you've reached the end of the file. The newcommand POINT #n,p sets the file pointer to any address in the file, so you can move directly to any record if you know the record length.

Some files contain random length records, like lines of text (hush, *Tasword* fans). BetaDos lets Basic programmers zoom forwards through a file in search of a numbered record. POINT #3, OVER 999 reads stream #3 at around 23000 bytes a second till 1999 new lines have been passed, leaving the file pointer read to INPUT the thousandth random length record.

The BetaDos format means large files load slightly faster. Catalogue operations are three or four times quicker than G+Dos, which makes a tremendous difference if you have lots of small files. The old commands to transfer individual sectors to and from memory now handle up to 96 sectors at a time, loading 48K in 2.2 seconds! For good measure, BetaDos fixes old bugs that might otherwise cause program corruption, sector errors or crashes.

Embarrassingly, BetaDos is faster than current versions of SAMDos. Mindful of this, the Good Doctor plans a Coupe upgrade that will bolster SAM Basic with the best of BetaDos and BetaBasic, and more besides. For now, BetaDos suits a 48K or 128K Spectrum and Plus D Rom 1A. Your Rom version is revealed as you load Dos; 1A is current. BetaDos costs £9.95 on 780K 3.5" disk (or tape, if you ask nicely); add a quid for Airmail delivery outside Europe. Wow!



Last news

I have just received the final issue of the *Beta Basic Newsletter*. This newsletter explains neat programming techniques to users of Beta Basic, a powerful extension package for Spectrum and CPC users. It's a good read for anyone keen on short, imaginative programs.

Beta Basic comes in two versions. Version 3 runs on any 48K Spectrum, while 4 is aimed at the original 128K system; it runs on Sinclair's 128 and the original grey Amstrad Plus Two, but will not suit the Plus Three or Plus 2A unless you replace Amstrad's 64K Rom with Sinclair's 32K chip.

The newsletter lists machine code to search memory for unexpected values, and a block-structured pointer routine allowing keyboard or Kempston mouse control. A Swedish reader contributes MIN, MAX and ODD functions, alongside a file purger for Microdrive and Opus users, and an ingenious procedure to send partial screendumps to a ZX printer.

Another demo generates random mazes and guides a monster that chases the player. Articles discuss applications of SORT and ALTER, proportional text justification, and a 'question and answer' section.

The newsletter stops after five years and 15 issues, but *Beta Basic* and back issues remain available. "Unfortunately, for some time now I have been employed on projects for other people where the deadlines really matter and are hard to meet. I probably should have given

up after issue 12, but I was persuaded otherwise", says Andy. It is good news that he is still beavering away on the Spectrum and SAM.

SAM Gold

It seems Daton and Enigma must share the SAM games market. Prolific Daniel Garner has used up some Letraset left over from Garner Designs and the Plus Three User Group, launching a leisure wing: New Aspects. First products are the revamped *Genesis* tapezine, for Spectrum 48K, 128K, SAM and Plus Three, and a couple of games - a panning shoot 'em up called *Rebellion*, and *Frustration*, a pipe-laying game.

The notable bit is that both titles feature attribute-free 16-colour graphics and stereo sound on SAM. The Coupe versions are incomplete as I write, early in July, but the graphics look brilliant. All versions will sell for £6.95. To hear more, call New Aspects on (0582) 472067.

Quicksilver's oldie *Mined Out* has possibly appeared on even more machines than *Football Manager*. Now it has arrived on SAM, with stereo sounds, better colour and new options. Troubles in Swansea have held up publication, but *Mined Out SAM* should surface as a budget disk by the time you read this. It's still fun, and very addictive.

ZX Premium Bond

Amstrad has revamped last year's Spectrum Plus 2A Action Pack with three James Bond games from Domark. The new pack sells for

£169, £20 more than the original Action Pack.

The 007 Action Pack includes the Plus 2A - Amstrad's latest cassette Spectrum, which boasts a Centronics printer port and reduced 48K compatibility - plus Trojan's Magnum lightgun and the three games: *Lord Branley's Estate*, *Mission*, and *Q's Shooting Range*. An 'exclusive taped message' from Spymaster Q is intended to set the scene.

The Plus 2A Bond bundle is available now, and should attract TV advertising this autumn. It appears that Plus Three stocks are still plentiful. Last year's Plus Three Spectrum disk bundle will stay at £199, with Mastertronics' original six lightgun games.

Amiga Spectrum

The Amiga Spectrum emulator has just arrived from Milan, but I have not yet had time to try it. The prototype is buggy and not Public Domain, as it includes images of Manic Miner and the 16K Spectrum Rom, but the next version will be bundled with a suitable cassette interface and a choice of English or Italian instructions.

Author Giovanni Zanetti has written Spectrum titles for Hewson and Mastertronic, so he knows the Spectrum well. He stresses that his emulator runs the undocumented Z80 instructions. More soon.

*If it's peak dialling time,
Timothy Green is probably asleep*

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