

PAY-BACK TIME

Few games have generated as much interest as *Frontier*, the sequel to the classic game *Elite* which was a heady mix of interstellar trading, ship-to-ship combat, and boldly going places.

Frontier follows a similar formula, but with the added attraction of assassinations, passengers and doing the dirty work of the two Empires which dominate the galaxy.

It took David Braben five years to create *Frontier* and it went straight to the top of the games charts, making it one of the biggest-selling games of 1993.

But it's bugged and many people have become disenchanted with the game due to the number of problems. We put these complaints to David Braben.

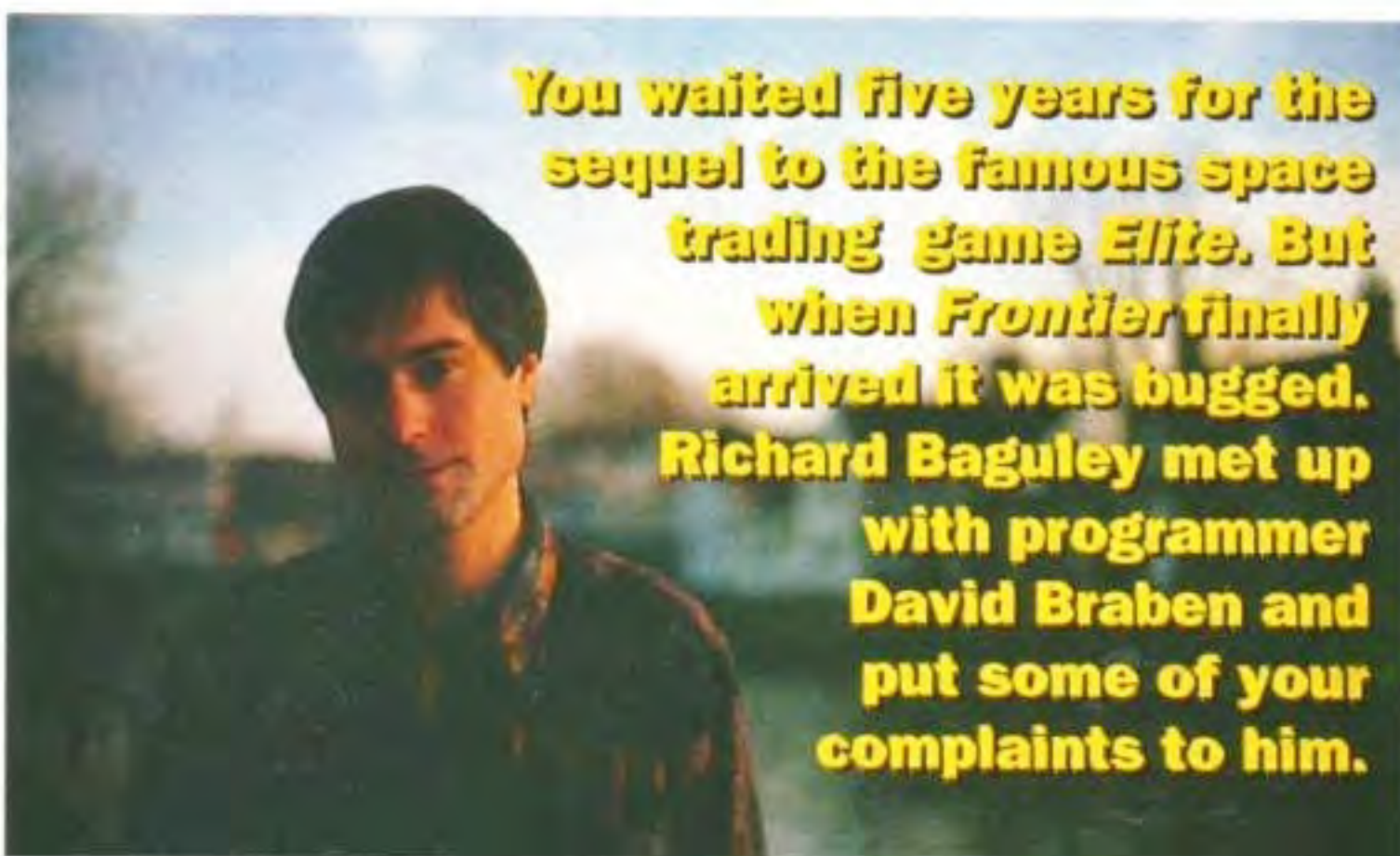
Copy protection

Firstly, there is the matter of the copy protection. It's a distinctly confusing system of picking a letter from a word on a page which was not helped by the omission of any instructions in the manual.

The problem is that you have to type in words from a specific point in the manual at various stages of the game. For example, you could be asked to type in the first letter of the third word on page 62. But the prompt doesn't make it clear if the third word includes the headline at the top of the page (it does include the headline, by the way).

If you type in the wrong letter, the time you have until you have to type in the next password is halved.

BRABEN'S BUGS



You waited five years for the sequel to the famous space trading game *Elite*. But when *Frontier* finally arrived it was bugged. Richard Baguley met up with programmer David Braben and put some of your complaints to him.



One of the bugs which has been removed in the later versions of *Frontier* is the one which means that when you try to sell your ship with passengers on board, you are credited with the value of the ship without actually selling it.

Get it wrong a few times and you are unceremoniously dumped out of the game, which seems a rather clumsy way of going about things.

David agrees the system is flawed, but points out that the manual now includes an insert with clearer instructions.

"We got a lot of complaints about this, so we have revised the documentation."



Autopilot

Several people have also made comments about the Autopilot, and the annoying habit it sometimes has of driving like a drunken space cadet and crashing into space stations and planets.

"The problem with *Frontier*, is that it's trying to make Autopilot realistic by simulating inertia. The Autopilot isn't cheating, it's

working out what thrusts to do and it's very complicated.

"It does get its knickers in a twist occasionally, because it tries to avoid targets, so if there is a planet in the way it will try to go round, but it won't necessarily get it right."

Assassinations

Assassinations are one of the most important parts of the game, and provide a good way of getting rich quick. However, sometimes an apparently successful assassination trip is greeted by a curt message about shooting the ship but missing the target.



"This isn't a bug. It's a feature. If there is a ship on the Tarmac, the target will get on board only shortly before it takes off. If you shoot the ship before it takes off, the target will not be on board."

Bug fixes

There are also a number of other bugs, such as the screen display in the Bulletin Board becoming corrupted in some systems and your ship being destroyed while paused.

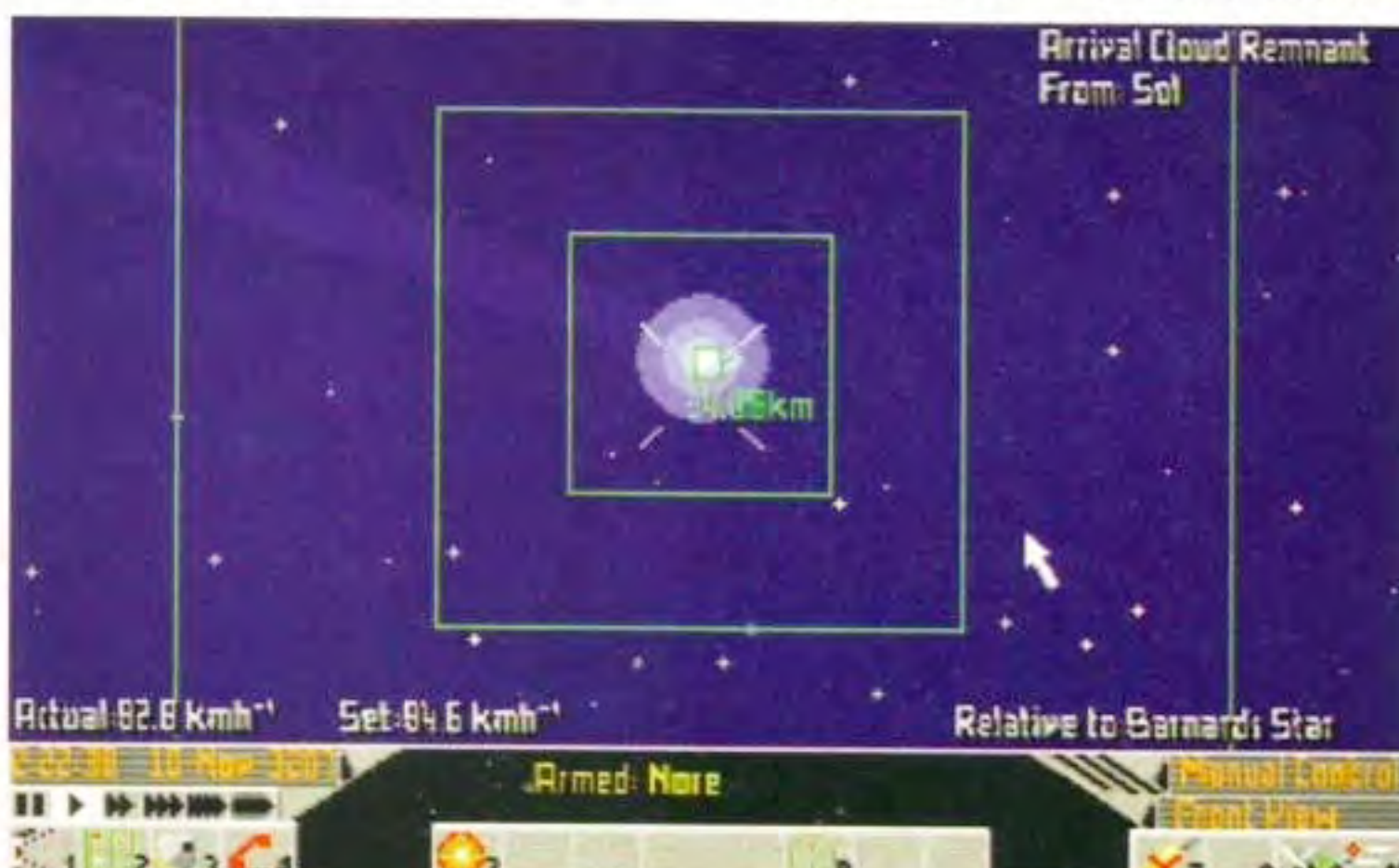
"We've done three bug fix revisions of *Frontier* since it was released. None of the bugs are serious enough not to have work-arounds. You can get a revised version by sending the original disk with an SAE to Gametek (5 Bath Road, Slough, Berks SL1 3UA)."

But shouldn't a game that has taken nearly five years to write be bug free?

"Most of these bugs require really obscure circumstances.



lo, the second moon of Saturn is a bit of a dump. There aren't any good restaurants, let alone any illegal goods worth having. In fact it's not really worth visiting at all, unless you fancy putting your feet up for a while and admiring the view.



One of the bugs that some of you claimed to have found in *Frontier* is that the program crashes if you try to analyse your own hyperspace cloud. As you can see from this picture, I've had no problems analysing this one.

DAVE BRABEN'S PLAYING TIPS


As you would expect, the bloke who wrote *Frontier* has a few tips on how to get the best out of the game. So here they are:

"An interesting challenge is to see how much money you can make in one trip. The obvious way to do this is to flog off all your ship's equipment to give yourself loads of cargo space, and then to buy the most expensive goods you can afford."

"Keep track of missing persons and the names of people who are looking for transport, because finding them is a very easy way of making several hundred credits."

"If goods are in short supply on a system, there will often be somebody on the Bulletin Board who is prepared to pay massively over the odds for them. If you are quick, you can often nip off to another system and buy the required goods and go back to sell them. If it's happened once, it's also likely to happen again, so if there is a requirement for battle weapons, there is likely to be another advert soon."

"There are some odd places where gemstones are considered to be waste, and they pay you to take them away."

 "You can use cargo as a weapon, so if you buy a whole load of cheap cargo, hover over somebody and dump it, they will be seriously damaged, although you are likely to incur the wrath of the police."

"There are references to Thargoids (the unpleasant aliens who waylaid innocent travellers in the original *Elite*) in the game, and there is a Thargoid ship in there somewhere. As far as I know, nobody has found it yet."



quickly that sort of time goes. I also spent a lot of that time looking into how things work and simulating the behaviour of solar systems, because a lot of work has gone into the astronomy side.

"I was in touch with Cambridge University astronomy department, because nobody had tried this sort of simulation before. I also spent a lot of time setting up all of the thousands of planets, space stations and other ships in the game.

"It was pretty well ready to go in very early 1993, but we had a lot of problems with the sound. In the end we had to completely rewrite a lot of the code, and that took time."

Given that *Frontier* was several years in the making, how does David feel about the criticism for it being heavily bugged?


"Yes, there are bugs in it, but most of them appeared pretty late in the day. I'm not exactly over the moon about it myself."

What happens next?

David is now planning enhanced AGA and CD³² versions of *Frontier*, although he has yet to decide a release date and exactly how they will be enhanced. But will there be an *Elite 3*?

"I have got no plans for an *Elite 3* as such, but there will probably be a follow on, which will still be *Frontier*.

"I don't want the *Frontier* worlds to die, so the follow-up will probably be more of an add-on to the existing systems, perhaps with more of a sense of a goal. One of the things that will be in there is a major alien race, with lots of missions associated with them."

David is now busy with other projects, including starting his own company, so the *Frontier* add-on is unlikely to appear for a few months. Hopefully, it won't take five years. 

It's very difficult to test every possibility, even with the 10 full-time beta testers that Gametek used. With most games, the code is pathetically small, with most of the space being taken up by graphics. With *Frontier*, it's all code."

So why did it take David Braben so long to finish *Frontier*?

"The total time was five years, but in the meantime I did write *Elite* for the Nintendo with Ian Bell, and I have done other bits and pieces. It's amazing how



If you fancy a quick cruise around a remarkably accurate representation of the solar system, then look no further than *Frontier*. It's all there in glorious technicolour.

GOT A GRIPE?

This is the first in an occasional series in which we put programmers on the spot. If you want something looked in to, write to AF Pay-back Time, 30 Monmouth Street, Bath BA1 2BW