

CREATURE FEATURE

Yes, the Diary is back – well, you asked for it! What's more, to make up for lost time we're giving you not one, but two personal accounts of Thalamus's latest blockbuster. Covering all aspects of the game are the Rowland brothers. They may not be as famous as the Bitmap Bros – yet – but at least they're real brothers, with John handling the programming while Steve provides the graphics. Collectively known as Apex Software they made their debut with the Sizzling *Retrograde*, while their previously written *Cyberdyne Warrior* added sparkle to the recent *Fourth Dimension* compilation. For the next few months they promise to divulge all the sordid details of their private lives, the development of local fast-food establishments, and maybe even something on their latest project: *Creatures*

Having spoken to Rob Hogg at ZZAP! this afternoon (April 4th) and agreeing to do a diary of our current project, we now deeply regret getting up this morning (hold on – we deeply regret getting up every morning) as we realise that we have to take note of most decisions and discoveries made to the game.

Unlike the previous four diaries (Andrew Braybrook – *Paradroid*, Jeff Minter – *Iridis*

Alpha, Andrew Braybrook – *Morpheus* and Martin Walker – *Citadel*) this one doesn't pick up a game from conception as we are about a third of the way through it already. But don't worry as in this instalment we will be summarising the last few months work, taking you from the creation of the game to its current stage in development.

Incidentally the game is called *Creatures*, which is an abbrevia-

tion of 'Clyde Radcliffe Exterminates All The Unfriendly, Repulsive, Earth-ridden Slime' (or something like that anyway).

In contrast to our last game *Retrograde* (you may of heard of it, well then again. . .). *Creatures* is not an 'all out – shoot anything that moves – serious shoot-'em-up'. By the time we had completed production on *Retrograde* we were sick to death of alien-bashing. *Creatures* is a 'cute' game – with friendly, furry, fluffy little animals not butch, laser-firing* aliens from outer space.

Anyway, let's get on with telling you how the game got to the stage (or should that be state) it is today . . .

SOMETIME AT THE BEGINNING OF JANUARY

JOHN: I now have three different horizontal scrolling methods to choose from, including one which has 'true parallax' (like *Hawkeye* but with a moving background, wow!). The first takes too much memory, the second uses too much computer horsepower but the third little piggy went wee wee wee all the way home! (No – stop, the men in white coats are coming). What I meant to say was the third scrolls 304 x 192 pixels at speeds of 0.5 to 8 pixels a 50th [of a second] with colour scroll on every character. Perfect! So naturally we'll make it a flick screen game instead (just kidding).

STEVE: Been sketching loads of ideas for the graphics on the first level and have since been recreating them on-screen (which look totally different to my original drawings). I also designed the main character of the game and named him Clyde (and why not?).

Talked to John about changing his control mode (Clyde, not John) in different environments (eg swimming when in water, skiing on snowy mountains etc). After John picked himself up off the floor in hysterics the answer was a big 'NO WAY' but I'll keep bugging him about it.

LATER IN JANUARY

JOHN: Having finally refined the scrolling routine and uploaded some graphics we still think there is not enough colour on the screen. So, in with some trusty colour splits (as in *Cyberdyne* and *Retrograde*) which make the graphics look awfully pretty (pretty awful).

It's now time to knock up the movement of our fluffy fuzzy. We hate games which have slow, cumbersome control modes so we try to make ours as playable as possible. I've been thinking about changing his control as he goes through the game (as Steve suggested) and have decided that it's not that bad after all. Now when Clyde falls into water he gains a diving helmet (complete with bubbles) and a limited supply of oxygen. Steve is so much happier.

STEVE: I have some good news and some bad news. The bad news is our local Wimpy (in Chelmsford) is closing down, but the good news is that it's reopening as a (drum roll) BurgerKing (yum-yum – the best burgers about). Back to the not-so-important news about *Creatures*. Finished the level graphics and want to do a map so all I need is a map editor (hint, hint John). Started working on the first piece of in-game music with some pretty decent results considering it's in one voice (with two voices for SFX).

Started the second level graphics which are designed with a light blue background colour, not black as with the previous level. This looks colourful and gives a rather tasty effect of daytime. This then gave us the idea that the levels could alternate between night and day.

THE BEGINNING OF FEBRUARY

JOHN: Took a break from the in-game routines and started the 'Get Ready' attract sequence. Instead of just the standard Get Ready most games have (yawn)

▼ The map screen for the first level, one of the many attractive presentation screens which Apex excel at.





▲Faceless and dumb the shopkeeper still needs plenty of work.

I threw in a scrolling level map for good measure. So now you can get a sneak look at what's ahead (aren't you lucky?). I also put the 'music on/off' option here instead of the title screen, enabling you to change the sound parameters during the game.

In preparation for a demo of *Creatures* I spent a couple of hours putting together a neat little front-end screen. From here you go to 'Get Ready' and then to the game itself, giving a good feeling of how the final game will gel together.

ABOUT THE MIDDLE OF FEBRUARY

JOHN: I've written a little map editor for Stevie so he can create a scrolling level out of his graphics. I always seem to spend a lot of time writing editors. For *Retrograde* I wrote seven or eight, ranging from sprite editors to nerve-centre editors (what a BIG waste of time).

We finally found some poor mug to sign up our game, mentioning no names (Dave 'GTE I6V' Birch) on behalf of some software company called... erm... urr... Thalamus - that's it. (Don't know if you've heard of them - cos we haven't). Oh, by the way, some mega important news: Burger King opens soon.

STEVE: Completed the Get Ready music today which suits the part quite well. A lot of my music is influenced by (copied from) the style of music we listen to. This isn't the usual 'hippy-image' Pink Floyd type music (not that there's anything wrong with that (Jeff)) but is closer to House/Dance music, which is a good thing as half our lives are spent in nightclubs (The Dukes Experience (Chelmsford), TOTS and Mr B's (Southend), Hippodrome (Colchester) etc).

Started researching into 'cute' aliens which unfortunately meant both of us going to Southend-on-Sea and playing arcade games all day (it's a hard life - but somebody's got to do it).

Spent a lot of time (and dosh) playing cute games such as *Mr Wardner*, *Galaga '88*, *New Zealand Story* etc. We also enjoyed playing *Airbusters* and *Megablast* (both horizontal shoot-'em-ups).

MARCH HAS ARRIVED

JOHN: Time to get aliens bouncing around the screen. We had to work out the approximate number of aliens which will be needed on-screen (off-screen ones won't be much good). The magic number we came up with was 15, plus the player sprites and bullets, plus the status sprites amounting to somewhere in the region of 26 (which I think I can handle).

It's here at last, Burger King is open! No more trips to Southend and Leicester Square. So Steve, Darren (our chief playtester for *Retrograde*) and myself now have a table permanently reserved there.

Dave 'JLG' Birch came over from Reading (the location of Thalamus HQ) together with John Wildsmith, who has the job of converting *Creatures* to the other 8-bit computers. The main reason for the visit was because Dave wanted our autographs (on the bottom of some contracts). But, the most important part of the day was the 'all expenses paid' lunch in (you guessed it) Burger King.

STEVE: It's time we had a new SFX editor so Rob 'squidgy' Ellis came out of retirement and accepted the task. A week or ten later we had a copy in our hands and will now use this in the game.

Yesterday I was doing the title music on the C128, which was being blasted from six speakers around the office, when suddenly half of them cut out. Being technically minded I grabbed a handful of cables from behind the amplifier and gave them a yank. This, however, was not a good idea as one explosion later we needed a new roof, some fresh underwear and a new sound chip. Today saw the C128 in bits and the insertion of its third SID chip.

MARCH'S MIDDLE MEMOIRS

JOHN: The aliens are coming (scream, shriek - run for your lives)! I now have all the enemy sprites moving and animating. Not only do their images animate but so do their colours (making for a pretty colourful screen). We've decided to make the aliens do more than just die when hit. We want some of them to react somehow - maybe mutate into other aliens or something (I'll have to think about this - yes, I do think every now and then).

We now know how each level is going to be structured. We're going to split the horizontal landscape into two, and insert a 'shop' in between (oh my God, they've gone and put another shop in). On completion of the second half of the level Clyde will go into a 'Torture Chamber' where he'll see one of his mates about to die (something gruesome, like being tied to a conveyor-belt approaching a circular saw). If Clyde saves his friend he will again go into the 'shop' to upgrade for the next level.

So as you can see (unless you're blind - in which case how are you reading this?), each level is going to be quite large. We're aiming at five or six levels for the game, it's really a matter of how many we can fit on the disk (with *Retrograde* we couldn't fit all the levels in the standard space allowed, so we had to squeeze data in areas not normally used).

STEVE: We've come up with a system to upgrade your fire-power. Throughout the level Clyde must collect 'magic potion creatures' which will be taken to the 'shop'. This will be in the form of a witch's hut. In here is a foul, ugly, grotesque witch who will, when given creatures, mix magic potions for you. There will be a selection of potions available all needing different ingredients.

Drinking a potion will not change his current weapon but will add it to the weapons available during the game. This means that all the weapons you ever get can be chosen during the game at a flick of the joystick.

Whilst glancing through the latest issue of *Playboy* (courtesy of playtester Darren - who prints it!) I changed my mind about the appearance of the witch. Instead of making her foul, ugly and grotesque (like John), she's going to be a 36-24-36 centrefold (unfortunately clothed).

Well there you have it, the end of March is approaching and so is the end of this instalment. Join us next month when we'll be giving you a report on Burger King, The Dukes Experience and, space permitting, *Creatures*.

▼ Yeah! John finally gets Clyde his snorkling gear!



STEVE: I had to create a map of level two for the demo which meant me staying up all night working (booooooring). I also discovered a new way of designing graphics - with my eyes shut (John prefers them that way).

Instead of the standard single character alphabet, we added a larger size (2 x 2) as we did in *Retrograde*. John uploaded this and put it onto the title screen.

CREATURE FEATURE

John has got Mad Cow Disease, ZZAP! want the music demo yesterday, Thalamus need a game outro tomorrow but — hey! — the Rowland Bros are cool. They've got their surfing gear on, it's hot and the pool beckons. Put a few computers on the poolside table with some cans of cider and let's pretend we're working.

WEDNESDAY APRIL 11th

JOHN: Happy birthday to you, happy birthday to you, happy birthday to Stevie, happy birthday to you (it's Steve's birthday today, in case you hadn't guessed).

Today we hitched a lift in Dave's Astra GTE 16v to ZZAP! HQ which meant us getting up at 4:30 am (yawn), as it takes one and a half hours to get to Thalamus then about two and a half hours to get to Newsfield. (One asks oneself is it worth it?) We gave the lads the first instalment of the diary and a demo of the game (for any screenshots that will be needed).

STEVE: As already mentioned we went to Newsfield today in Dave's black beast. Thanks to Rob and Phil for the entertainment all afternoon and thanks to Carol for the coffee.

While we were there we

happened to notice a nifty little joystick called an 'Ultimate dial-a-speed superstick'. Now, the guys can't remember where they got it (they're not stupid OK), so if you know where to get hold of one, please could you let us know. (Try Euromax, we'll be reviewing it next issue — Ed)

FRIDAY APRIL 13th

Today is Friday the 13th and don't we know it!!

Two of our computers picked up a virus, causing them to overheat and start a small fire. This then turned into a big fire, setting our entire house alight. A motorist passing by diverted his attention from driving for a split second, to look at the inferno. This, unfortunately, was just long enough for him not to see the pedestrian crossing the road. Swerving to avoid him, he went through the living room window of the house opposite. Sadly this ruptured their gas

main and caused spontaneous combustion of the entire estate. As it happens the Nuclear power station near by was a little too near... STOP! That's it! This is getting too ridiculous. If you believe any of the above you're more stupid than Rob 'that's a nice earring' Ellis looks. (Sorry Rob but we had to pick on someone).

TUESDAY APRIL 17th

JOHN: The last four days have been a bank holiday weekend and therefore we've been down Southend a few times playing loads of games. One that I'm hooked on again is *Space Harrier* (I used to love this game).

Started to design the first 'torture screen'. We did a couple of sketches to work out what was going to go where etc. After a few hours coding I now have the screen set up for some graphics. Steve insists on only leaving two characters blank at the bottom of the screen for the sprite status to go over, giving him more room for the torture screen above. So, not having enough room for the status, I have to move it down eight pixels and take out the border (not that anyone's going to notice).

STEVE: After the nice long, relaxing weekend it's back to work on a new section of the game: the torture screens. The sketches for them look great. If they turn out like we hope, they will be lots of fun to play and watch. There aren't enough sprites on the CBM64 to cope with parts of the torture screen, so we resort to animating characters as well. There are two creatures made from characters which will animate on this torture screen. These are (a) the creature that pulls the platform up the screen when you jump on it, and (b) the creature on the bike that powers the generator to the Acme saw mill. There will be 32 sprites on screen for this section with

space for 122 animations in memory.

WEDNESDAY APRIL 18th

JOHN: I was drinking some lemonade while I was working this morning, and accidentally spilt some on the PC keyboard. So I wiped it off and thought nothing of it — until this afternoon when half a dozen of the keys decide to stickkk down when I press them. It couldn't happen on some trivial keys, it has to happen on all the important ones likkke Assemble, Escape, Monitor and a few letters. Out with the WD40 me thinks.

Spoke to Rob Hogg this afternoon about a 'music select system' for a cover cassette. Anyone who has a disk version of *Retrograde* will have seen one we've done already. Anyway, we decided it would be a pretty good idea to put one on next month's cassette (last month's by the time you read this!). I've therefore spent the last couple of hours ripping out our first select system ready to upgrade. **STEVE:** Another music select system, hmmm, this means stopping production on *Creatures* for a few days to write/compose/copy about four bits of music. Some of the tunes on the select system are old, some tunes have been written for our old games but we ran out of memory to put them in so I write another bit in less memory and we have the first one left. This happens quite often and I've now got about fifteen double-sided disks full of music. However, I still write new stuff such as 'Apex Beats' which is quite funky.

FRIDAY APRIL 20th

JOHN: Now we've finished the select system it's time to transfer it onto cassette. Rob H wants it as little as possible (oo-er!) and we manage to squeeze

▼ The hilarious Torture Screen, there's one after each level and they require some pretty tactics.



it onto 1 minute 25 seconds of tape. The only problem is that it doesn't always load. God knows why, so please can he tell us? **STEVE:** As a last resort to make the select system load more often (load at all) we guess that the cassette heads might be dirty, considering we haven't used it for about 18 months. So it's a trip down town to get some head-cleaner (for the cassette player, obviously — even though John's head is pretty dirty).

MONDAY APRIL 23rd

(St George's Day, don't you know)

JOHN: Having already posted the music demo to ZZAP!, we realised that there was a 'deliberate' mistake with the text on-screen. As it's an upgrade from the one we did last year it has last year's date on it, which I forgot to modify (how stupid can you get?... well there's Steve for a start).

STEVE: After buying a copy of *Ghosts 'N' Ghouls* and playing it for an hour, we have decided that there aren't enough restart points. If you get just under half way through the level and die, you go all the way back to the start (which is pretty damn frustrating). *Creatures* will probably have nine or ten per level.

TUESDAY APRIL 24th

JOHN: This morning we received a demo from Rob 'mine's a pint' Stevens (the programmer responsible for *Snare*, but we don't hold that against him — just kidding) which creates glitch-free raster splits with sprites passing over them. We need this for the colour splits in *Creatures* (tm), (p) 1990, (c) 1990, (r) 1990 etc etc.

STEVE: After working peacefully all day, Rob H phones at 5:45 to say could they have any more of our music (as they like it so much). The only problem is that they need it by the 26th, meaning a Datapost job tomorrow afternoon.

WEDNESDAY APRIL 25th

JOHN: I should be doing the game today but I've got to modify the music select system, again. I suppose this gives me the chance to correct the mistake of not changing 1989 to 1990. Having lost half the day to the music stuff, we worked until about midnight on the game (now there's dedication for you).



▲ Only 24 hours to save Thalamus, write a hit demo for ZZAP! and cure John (the bro' on the left).

STEVE: In the space of about five hours I've written (copied — John) three bits of music (including a 'dub mix' of Apex beats). The 'game over' music is one of the shortest bits ever (memory wise) being 239 bytes long. It was in the post at about 2 o'clock and will get to ZZAP! in the morning.

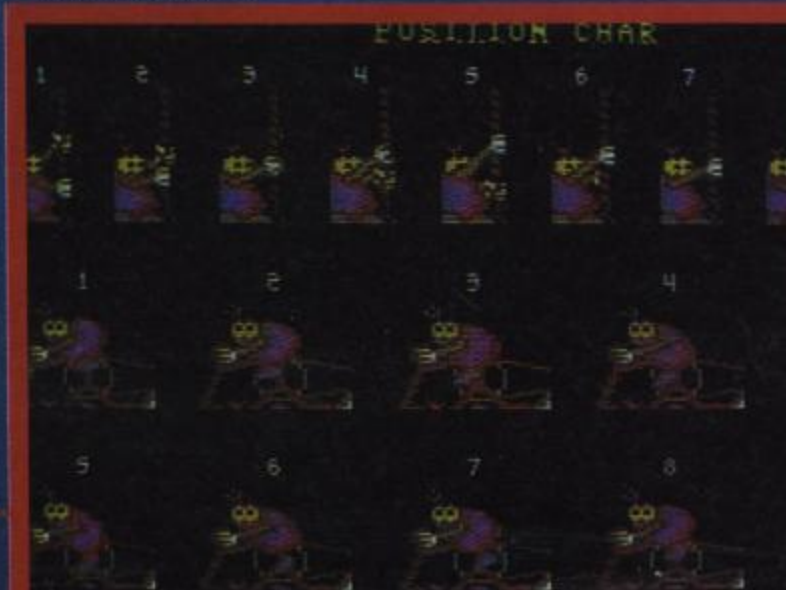
MONDAY APRIL 30th

JOHN: This morning we received our copy of 4th *Dimension* from Hewson (thanks Paul). After loading *Cyberdyne Warrior* we noticed that one of the voices for the title music wasn't working! Looks like the loader screwed it up as this only happens the first time the title screen appears.

On the torture screen side I spent most of the day making one of the aliens go to sleep, then the rest of the day waking him up.

STEVE: Today is hot! This gives us an excuse to work in shorts and shades. Started the music for the torture screen this morning which is nice and cute. I also continued to do the graphics for the 'waterfall' level, which is hopefully where Clyde will use a boat or arm bands to progress. Did the big alien with real bad breath who tries to set you alight.

▼ Even one of the comparatively minor characters has plenty of frames of animation.



WEDNESDAY MAY 2nd

JOHN: I now have the big alien moving back'n'forth and spitting fire (looks quite good actually). The sleepy alien can also pull the platform needed to get Clyde from the bottom of the screen to the top.

The weather has been well hot the last few days, which means it's that time of the year when we must clean and heat the pool.

STEVE: Finished designing the graphics for the waterfall level and now have the large task of transferring them into a scrolly map. Came up with a cute rat-type (Irem?) creature today, which will eat through the rope.

FRIDAY MAY 4th

JOHN: That's it! We've had enough. All week we've been chained to the computers (but enough of this kinky talk) while there's been bright sunshine, the sound of lawn mowers and a clean heated swimming pool outside. By mid-afternoon we had cracked and just had to go for a dip. (Can you blame us?)

STEVE: After persuading John to take half the afternoon off we went out to the poolside and caught some rays (yeah, man). Thinking about arranging a

pool/bar-b-que party tomorrow (Saturday), admission being a 'six-pack and sausages'.

TUESDAY MAY 8th

JOHN: I've taught the rats to walk about randomly and the weight now flattens the alien on the bike. So what if I used self-modifying code? I happen to like using it, okay (considering it takes up less memory and processing time).

We got hold of another Amiga, monitor, disks, books, joysticks etc. They belonged to Rob 'listen 'ear' Ellis, and we got the lot for £1.25 and a can of Tennents Super.

STEVE: Received a phone call from Dave 'silky' Birch today, asking me to do the 'game complete' graphics for *The Search For Sharla*, another Thalamoose game. So it's another break from *Creatures* to get on with this straight away.

FRIDAY MAY 11th

JOHN: The presentation bits have been added to the torture screen now. There's the 'Get Ready' and 'Level complete' in there (which we're quite pleased with), boosting memory to 3K more than a level in *Retrograde*.

So many games these days (including some arcade games) don't give very satisfactory 'complete sequences'. If I complete a level I want to feel a sense of achievement, even more so if I complete the game. You know what I mean, staying up 'till three in the morning playing a game, doing it, and getting a boring message saying 'game complete' followed by a list of credits on who wrote the damn thing. We like to put a bit more effort in than that (check out *Retrograde's* 'game complete' sequence — plug, plug).

STEVE: The last few days have been fairly uneventful, as I've been doing the graphics for *The Search For Sharla*. The only exciting thing that's happened was when I did the Level Complete music for *Creatures*. At least I can look forward to the nightclubbing at the weekend, together with a hefty dose of alcohol and junk food. We haven't had a Burger King for about two weeks, is this a record? (And would it get on to Top of the Pops?) John's starting to show withdrawal symptoms — running round in circles, waving his arms in the air and foaming at the mouth (I wonder if anyone will notice the difference in his behaviour... I doubt it). (Maybe he's got Mad Cow Disease! — Ed)

CREATURE FEATURE

Congratulations — you have found the feature that ZZAP! was made for! Yes, we're back, to thrill and excite you with our diary-of-an-entertainment-software-product (well, a game anyway). This month's instalment has been brought to you with help from the following: a selection of junk food (including Kentucky Fried Chicken and Burger King — at least once a week); a selection of nightclubs (including Holywoods in Romford); a selection of music (Snap — cool remix, Tony Scott, Mr Lee, Mantronix and Tyree Cooper); and a selection of women (too many to mention).



▲ The old *Retrograde* team, with Rob Ellis on the right. Sadly Rob, AKA Transmission Software, has now given up programming.

MONDAY MAY 14TH

John: Spent most of the day typing up the second instalment of this diary. This meant that not a lot of work got done to the game. I've nearly finished the first torture screen with only some little bits on the Level Complete sequence left to do. This includes a 'creature count' feature. As Clyde has saved his fluffy friend from a rather messy death, his mate offers Clyde his collection of 'magic potion creatures' as reward — Clyde obviously accepts. Therefore there must be an on-screen count showing your collection increasing.

Steve: I've been working on the latest level and been trying to get a demo ready to give the guys a ZZAP! on Wednesday. This level sees Clyde travelling through water, as in another level, but instead of being underwater we will have to come up with some other mode of transport. There are half a dozen ideas floating around (sorry about the pun) and the favourites are Clyde standing on a raft, rowing a boat or the most probable mode, swimming with his arm-bands.

Yet again the normal day-before-a-demo routine is back, with the early morning start of work and the late finish at night, usually followed by a few hours sleep then up bright (?) and early to start the four-hour journey, first to Thalamus (Aldermaston) and then to Newsfield (Ludlow).

WEDNESDAY MAY 16TH

John: After travelling half way across the country we finally reached the ZZAP! offices. We showed the lads the torture screen — which they seemed to like (can ya blame 'em?). We also picked up half a dozen copies of ZZAP! containing our *Retrograde* tips, our music select system and our diary-of-a-game, with a little space left in the magazine for game

reviews etc. We visited 'ZZAP! HQ' with the programmer of *Venom Wing* (another Thalamus game which just happens to be a shoot-'em-up). Thanks Pieter for the Dutch lager and the scrummy (?) sweets (which I don't think we'll be eating in a hurry).

Steve: We are so lucky and privileged. The thing I look forward to most about travelling to ZZAP! is the part of the journey that we get to witness Dave 'SLGETHGPI' Birch's brilliant handling of the 'not quite black but it looks good anyway' 16v GTE Vauxhall Astra. (If you believe that then you believe anything — like Burger Kings are good for you, there's life on Mars, Dave's good looking and John's got more than one brain cell). After eventually arriving at ZZAP! we got settled down and showed (off) our demos of the game. We came up with the idea of giving away bugs with the game (not the computer sort) which look like Clyde (Newsfield had them a couple of years ago at the PCW show). The bugs may even be given away at this year's computer show.

FRIDAY MAY 18TH

John: As the 'alien sequencer' nears completion, I realise that there is an awful lot of information needed to set up an enemy sprite. All the little options such as expansion, sprite/background priority, explosion types, start delays etc are crammed into 17 bytes per alien. This means that when we come to map aliens over the levels, there's going to be a lot of messing about with binary numbers — switching on and off different flags within each 17-byte range. You'll never guess what all this is leading to... that's right, an EDITOR.

This is going to have to be in memory at the same time as the game code and level data. As it happens I've got 8K under ROM from \$E000 to \$FFFF. But this does mean that I'm going to have to write my own





TUESDAY MAY 29TH

John: Looking at Steve's entry about us being tortured by Bros, gives me an idea for a torture screen. How about a Fuzzy tied to a wall, with a very large speaker in front of him, connected to a very powerful amplifier, connected to a record player which is playing music by Bros? What a NIGHTMARE! Not even I could subject a Fuzzy-Wuzzy to Bros music. (Actually, I can't recall any of Bros's records containing music!).

On the subject of torture screens, we received a load of ideas from Andy Roberts this morning which were 'absolutely brilliant' (in his own words). All I've got to do now is find the time to put the ideas we've got into the game.

Also spoke to Dave 'OJLG' today about little Clydes in the margins of ZZAP! (like Rockford a year or so ago). Is this a good idea? What do you lot reckon? I think we have a right to know.

input/output routines as any in ROM will be banked out so I can access my code underneath. By the end of the night (we actually worked on a Friday night instead of going to a club), my PC was overheating — causing all sorts of errors during assembly. For a short while I thought some of them were my fault (how silly can you get?).

Steve: Today sees me halting production on *Creatures* for a few weeks to work on another Thalamus project, *The Search For Sharla*. The game is near completion so my added bit of sparkle will be in the form of graphics for the 'game complete' sequence. Without giving too much away, there will be a bitmap screen with a 4x3 sprite grid on top with loads of animations.

MONDAY MAY 21ST

John: We finished off the weekend last night in Burger King (what a surprise). It had been ages since we had one (well, a week anyway). I think Steve's burger was infected with BSE and consequently he's picked up 'mad cow disease'. Mind you, it's a tough job to tell the difference in his behaviour.

The alien editor is taking shape, with a good looking menu screen. I think I'll chuck in the current alien being edited at the top of the screen. This means any alterations made to it will be instantly visible (eg animation and colour patterns, multi/hi-res modes etc).

Steve: I'm continuing with the *Sharla* graphics but instead of doing the bitmap screen I've started on the sprites. This is a difficult task as I haven't got any editors that let me edit 4x3 sprites, so I have to design the image in two parts. To make a break from doing graphics I loaded up John's real cool music editor and spent a few hours adding some vibes to the title music. I soon got bored of that too, so come 8.30pm we all went for a drink down at Dukes.

THURSDAY MAY 24TH

John: The last few days have been extremely long ones. The editor is nearly complete, with just one more option to do. It's relatively easy to set up an alien, and map him/her/it onto the level. Received a phone call today from a certain Andrew Roberts (there you go Andy — immortal fame!). He got our

number off Robin 'the phone book' Hogg. We had a (very) long chat about the game, with loads of ideas for the torture chambers being thrown at me. It's hard to draw a screen which is being described to you over the phone, so I've convinced Andy to post the ideas.



▲ The map editor. If you squint you can see all the different graphics which will be used to create maps shown before each level.

Steve: Finally finished *The Search For Sharla* graphics, and the end result is pretty good, so it's back to work on the best game of all time, *Creatures* (*Retrograde* being the second best — bias, me!, never).

Went to Burger King last night (again) and surprisingly didn't see any Mad Cows, apart from Niki, our little sister (just kidding). Incidentally, if anyone is wondering why the *Retrograde* cheat is 'I hate Bros' here's why: in the many months of production on *Retrograde* we would very often awaken to the sounds of 'I Owe You Nothing', 'I Quit' and many other songs Bros were responsible for, not to mention the little 'brosette' that now lived with us. Eventually Niki grew out of this stage and we no longer have to be subjected to such torture. However, recently she has shown signs of another pop music following, which could arguably be as bad as Bros: they are 'And Why Not'. Can you guess what the cheat will be for *Creatures*?

Steve: Today I carried on with work to the shop, the actual layout of which has been adjusted to perfection. The witch has been finished (make-up and all) and we may put a cauldron in with the cute little magic potion creatures splashing into it and being boiled alive (call the RSPCA!). This afternoon we had a visit from two of our friends Mark Palmer and Steve Packer, who were full of ideas for the torture screens. Since the first torture screen was done, anyone who has seen it has offered loads of ideas for more screens: what we will probably do is combine a lot of ideas for each of the torture screens.

WEDNESDAY MAY 30TH

John: I've been adding some small options to the alien editor which make using it a little easier. However, I've discovered a problem with my keyboard

▼ In the graveyard — the final level currently lacking parallax scrolling.



debounce routine — it doesn't always work! This will need a little investigation. When I set up an alien this morning to test the editor was working, I noticed a bug in my 'AMOVE' routine. This is a subroutine which moves aliens around the screen. So far the next hour I'm rewriting code which was originally written a year ago.

We received more torture chamber designs from Andy Roberts today — he's working on the screens harder than we are! He also sent us a demo disk with some pretty nifty stuff on it. Thanks.

Andy Smith (another Andy?) saw the torture screen a few days ago, and heard the music. He and I decided that Steve can't write cute music as it always has a funky bass and drums and that 'synth' instrument in. (Personally, I don't think he can write music at all, but don't tell him I said that).

Steve: The shop graphics still aren't finished. I've adjusted the two creatures that hold the status area at the top of the screen: inside this status box go the magic potion creatures you have collected. There is also a status area at the bottom of the screen which is for your weapon selection. We have allowed room on the screen for a speech box so the witch can talk to Clyde. She will also describe the potions you may want to have concocted; it's these potions that Clyde will drink and be given magical weapon powers.

I also have the task of doing the shop music. I would say that I'm going to make it cute music but no-one thinks I can do that, so it's the normal synth music.

FRIDAY JUNE 1ST

John: I modified the alien movement routine today to allow looping back over a series of movements (and not just the current direction as it used to be). Starting to get a tad bored during assembly. It takes about 7 seconds to assemble the game at the moment, including the 8K of editor code. This isn't too bad I suppose, especially compared to my mate Andy Smith's game. His assembly time is about 15 minutes.

Worked up to 7 o'clock tonight but I started getting hungry and unfortunately my stomach takes priority over work. Anyway, I had to stop some time around then so I could get ready to go clubbin' tonight.

Steve: This morning I finished the shop music, and a very good bit it is too. It's my favourite piece in the game so far, with the title music in second place (and they both have bass 'n'



▲ John's creature editor shows the complexity of the sprite animation in *Creatures*.

drums in).

I've been thinking about the fourth level graphics and aliens. John and I have decided on making it a graveyard scene which leads to a castle at the end of the game. In the castle will be where most of your fellow fuzzy-wuzzies are being held captive: your ultimate task is to rescue all of your villagers from certain death. You then return them back to your village and live in peace forever and ever. The End (what a happy ending).

Also today I thought of another weapon that Clyde could get from drinking his magic potions. It's a grenade-type weapon which may look similar to the bombs you fire out in *Vulcan Venture*.

TUESDAY JUNE 5TH

John: The editor is finally finished — give or take a few minor bugs. I'm now starting to add some alien movement patterns to the level data. I hate timing an enemy animation to a movement pattern, having to get it to animate at the correct points within the pattern. It always takes so long. Talked to Dave 'ITOTBABB' Birch today trying to persuade him to take us up to Newsfield next week. Then we can get some feed back from the lads on any demos we have for them.

By the way, if you want to know what any of the abbreviations associated with

Dave are, don't hesitate to phone Thalamus and ask! (hee, hee).

Steve: It's time to design some more 'unfriendly, repulsive, earth-ridden slime' (well, some aliens). The extra few aliens I've added to the level 'alien sprite bank' have used up all the animations John's allowed, so next we will be working out some pretty decent patterns for these aliens to move around in (some will also shoot fireballs etc). Now all John has to do is type these patterns into PDS, which he says is boring and frustrating but I'm sure he likes it really!

CREATURE FEATURE

Do you ever get that feeling that there is something missing from the magazine? This issue just hasn't got that little something that makes it quite complete. Hold on, we know what it is.... the RETROGRADE tips! So, to make up for lost space, we're going to make this instalment six pages long and call the magazine 'CREATURES 64' (we wish).

SATURDAY JULY 14TH

What a day! We woke up this afternoon and thought we were in the Caribbean — it's that hot. Then we realised we had to stay indoors and type up this flipping diary. Oh well, we'd better get on with it...

WEDNESDAY JUNE 13TH

John: Well guess what we did today, that's right — we went to ZZAP! HQ (all our diaries start with this). Pieter 'Venom Wing' Opdam was there (actually he's been there for about five weeks) still adding the finishing touches to his game (and having A LOT of mastering problems — shouldn't have made your copy protection so good, eh Pieter?).

Steve: The guys at ZZAP! have been viewing the latest version of *Creatures*. This happens to be the last level of the game which starts off in a graveyard setting and leads on

to the castle and torture chamber at the end of the game (which was shown in the last issue).

FRIDAY 15TH JUNE

John: Today I started coding the Shop, represented by a witch's hut. The (pretty) witch is going to be speaking to Clyde during his visit in the shop, so I've had to write a couple of small routines which will print speech bubbles to the screen and what she says inside them.

Accidentally found a very pretty effect using overlaid sprites yesterday. It all came about from the arrowhead used in the 'Get Ready' attract sequence, and looks like vertical 'colour splits'. Anyway, without giving too much away, I reckon I could make good use of it as a 'screen appearance' system, maybe for the High Scores screen.

Steve: The shop graphics are really finished this time. I know I've said it before but the final adjustments have been made and it's all done.

The time has come to design the second 'hilarious' torture screen. This will see one of Clyde's friends tied onto the top of an 'ACME jack' which is being worked by one of the bad guys. Above the jack is a swinging blade which will surely slice the poor fuzzy-wuzzy in two. You're required to save the fuzzy by stopping the jack: I'm not going to give too much away but it involves

a rock, a seesaw and a cannon ball.

TUESDAY 19TH JUNE

John: Took a little time off from doing the shop this morning as I had to add some restart points to the second level. I found a little bug in the game yesterday which sometimes caused an alien not to appear. As this was a fairly major bug I had to stop work on the shop (again) and fix it.

Also found out about a series of 'monster movies' on Channel 4. They run at about 11.00 pm each Friday and I'll give you three guesses at the title of the series... that's right — The Creature Feature.

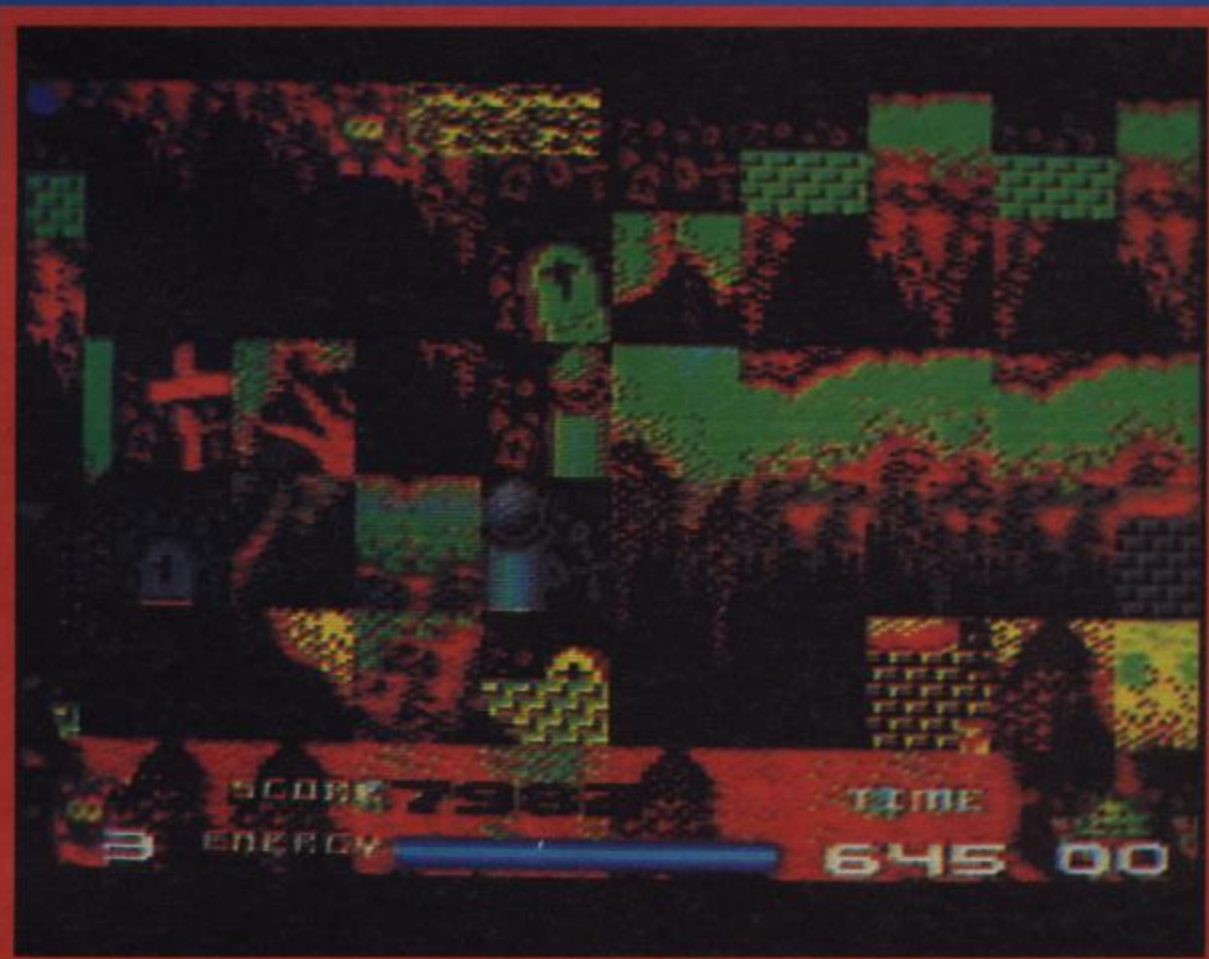
Steve: I've spent a few days working on the alien maps. All the screenshots of the game so far have had demo aliens on them which haven't actually been mapped onto any platforms or anything. This means that there has never been a demo of the game with aliens walking, flying or swimming around. So there's never been any proper gameplay before now.

In between doing the aliens I've done the shop music, which has had much praise from Andy Smith. It has the bass 'n' drums we come to expect from me with a real nice wobble at start.

FRIDAY 22ND JUNE

John: After working loads of

▼ A jumble of graphics which might be put into order once the Rowland Bros come back off their hols!



hours on the shop the last couple of days, I've hit a problem — adding a purchased weapon to Clyde's weapon list. I've studied a print-out for the last hour and modified my code several thousand times but it still doesn't work. By the end of the afternoon I'm getting very annoyed and end up throwing 'coosh-balls' round the room. If you don't know what a coosh-ball is then check out the last instalment of the diary. The piccy of us on the bottom left of the first page has me with some coosh-ball earrings!

Steve: After getting the basic design of the second torture screen, with all the sprite and colour splits worked out, the next task is to reproduce the drawings onto the C64. I started designing the characters and have produced a really colourful effect that has the left half of the screen on light blue and the right half on black. Most of the devices on this screen are animated through characters and windows, such as the Acme jack and the swinging blade. These use up a lot of character animations and therefore have to be stored out of the current on-screen charset (character set) and stored over when needed.

TUESDAY 26TH JUNE

John: Spent yesterday morning fixing ANOTHER bug Steve found in my 'alien movement' routine: any aliens moving with a speed of a pixel every other 50th (of a second) in an X direction somehow screwed up the other aliens. Don't ask me how. I'm only a programmer (just).

I spent this morning adding an information option to the list of icons in the shop. If you select this the witch will give you a handy playing tip for the following torture screen. But, as we only allowed four lines of text in her speech bubble, it's not a great deal of info. So I came up with the idea of being able to buy additional info if you want it. I also chucked in a little routine which pulsed the icon tablet every time you purchase something.

Steve: The torture screen chars are now finished, even though sometime in the future I'll probably adjust and add bits to them. So next on the long list of 'things to do' are the sprites for this section, starting with the creature that works the Acme jack.

I've also been adding more aliens to the scrolling section. I'm just completing the last part of water on the first level, with all the cute little fishes and smiling puffer fish.

THURSDAY 28TH JUNE

John: Wednesday's post contained a demo disk from Andy Roberts. It also had some of his bitmap screens on, with our favourite apparently taking the least time to copy — sorry — create! (Now where have I seen that Lamborghini before?)

This afternoon was another 'stop work on what ever I'm doing and fix a major bug' afternoon. The problem? The sprite 2 sprite detection subroutine. This is used by my UTHEM and BULTHEM routines (you against aliens and your bullets against aliens respectively). The problem with it is the detection over the '255 line' (MSB). I still haven't fixed that blasted thing — I don't know what it is. (My poor little coosh-ball has taken one heck of a hammering today, especially after one of my source disks crashed!)

Steve: I have now finished the first level of aliens and am about to start the second level, which begins in water. This then leads onto a long section of forest, then to the end of level and torture chamber. Your journey through the forest will not be easy as you have to tackle many fierce aliens (with cute bug-eyes).

As John has been working on the 'shop' section of the game, he requires some graphics for the weapon selection. So, as usual, I have to stop what I'm doing and oblige. The graphics he needs are a few extra icons to go in the list of weapon icons you can buy; the extra ones are an information icon and an exit icon. While I'm trying to design a good-looking info icon, I have the idea of trying to do the Tourist Information 'i', that you get on the signs and on the maps.

MONDAY 2ND JULY

John: At long last — I've fixed my detection subroutine!!! So what if it was only luck that I fixed it in the end, at least it's done.

Had to take an hour off from *Creatures* to reply to some fan mail we received late last week. Mark Bishop (from Dudley, which doesn't have very good software stores) sent a letter to ZZAP! to pass onto us. He included a handful of Burger King cards with the winning panels scratched off, giving us free Whoppers, fries and cokes. Rob H just had to take one before passing them onto us, didn't he? Mark also liked the same music we do (check out King Bee — Back By Dope Demand, it's great (I just

luv the video)). Anyway, thanks Mark for an entertaining letter and of course, the BK cards.

Steve: Hey man! Done some real wicked vibes today! — well I need a break from mapping on aliens. Whenever something gets a bit boring I usually compose (copy?) some music, so our disk boxes are overflowing with tunes, ditties and drums.

Another brainwave, this time in the form of a new magic potion for another weapon. This weapon will have Clyde spitting flames, but they will stream out further than normal and go through any platforms in the way.

There are more sprites to be added to the waterfall level, but I may be starting to run out of ideas for aliens. This level has got some good aliens like the cute little birdies, the big bug-eyed slugs and the 'Old-age Mutant Heroine Tortoises' (just kidding about the last one).

WEDNESDAY 4TH JULY

John: Spoke to Pieter Opdam yesterday about a *Creatures* demo for him and his mates. They might be doing the 16-bit conversions of *Creatures* for Thalamus.

Fixed loadsabugs today including some which have been in the game for months: the colour scroll glitch (the colours for characters at the bottom right of the screen don't update fast enough) and alien explosion colours (the colours have a nasty habit of going out of time with animations, which doesn't look too cool!). I also modified my dreaded sprite 2 sprite collision code to detect vertically expanded sprites properly.

Steve: Finally I've finished a level of aliens. This level is the third out of six (at the moment anyway — but it may change again).

As soon as John gets his finger out and saves off the next alien map editor (level four) I can continue with more alien mapping but in the meantime I shall continue with the sprite aliens on the first and second levels.

Rob Ellis has recommended that we hear Jean Michel Jarre's new album — *Waiting For Cousteau*, so on it goes as we work away. This music is perfect for working to, really relaxing and mellow. Some of the tunes are quite cute in a way, and I may be inspired by them (copyright — what's that?) One of the best tracks is 22 mins long — imagine that for title music!

MONDAY 9TH JULY

John: As Steve's mentioned before, Clyde starts the fourth level in water. When I uploaded the map and Clyde appeared in the water, it looked okay — until I pushed up. Every pixel Clyde moved up, his jump sound effect played. I half expected something like this was going to happen as it's not the conventional way of getting under water (he usually has to fall into it). A bit of messing around with the code and I've not only fixed the bug but I've arranged the code's structure so I can incorporate different movement routines for each level.

Steve: More work on level four, adding two screens to the water section at the start of the level. After the water section ends you have the long section of forest to deal with. John now has to upload the new map before I can continue with more aliens, so it's back to more level one and two sprites (again). I've got a nice goblin-type creature strutting his funky stuff and some neat turning animations for him.

FRIDAY 13TH JULY

John: Adjusted the in-game colour splits today. Instead of indiscriminately splitting all colours, they now only split colours which are different. On the subject of colours, I decided to do something about the lack of effective sprite colours we can use. At the moment we can normally only use five or six, the sprite multicolours being dark grey and yellow. I managed to get an extra seven or eight 'good looking' ones today (by mixing two present colours, eg green and pink to form a greeny-pink colour... hmmm).

Steve: As you probably know already, the first level of the game has a waterfall in it and today saw me trying to animate the diagonal corner. The problem here is I have to design the frames one by one and can't see them animating until John has uploaded them and put them in the level.

The first attempt looked a bit messy but once I had sorted out this problem I did a second version which is much better. The diagonal slope of water is preceded by the horizontal section that you swim in, which has some pretty neat animations for Clyde splashing around and nice parallax water. After the corner you have the vertical drop into the water below. We may put sound effects in for the waterfall which will get louder as you get nearer and fade away as you leave.

CREATURE FEATURE

Once again, the Apex posse are here — doin' our own thang. That's right, we're back, vibin' it up in what will probably be the penultimate instalment! So, as we pad out this sentence to fill this box, we'll get on with letting you know what we did (and didn't do) this month.

MONDAY JULY 16TH

Spent the entire day typing up last month's diary! The problem was that it was mega-hot outside and we were inside... boohoo.

TUESDAY JULY 17TH

John: The worst time to be a programmer is when we have weather like this. Not a cloud in the sky and we're stuck behind computers all day (ho-hum). So, pressing on with work I've been adjusting the Alien Editor again (there was a screenshot of it a couple of issues back). This time I've been adding the option to say whether an alien has one of the standard C64 colours or one of my 'new and improved' colours. You can't just say the alien is to have a non-64 colour, you must mix up a new one from the present 16 — which often proves great fun (loadsapurple).

Steve: A few issues back I

mentioned that for the first level of the game Clyde would

use armbands to progress through the sections of water. However, this has now changed, as the idea wasn't properly thought out (as usual) and consequently we ran into an incurable problem. So after spending all that time designing the animations of Clyde doing the front crawl (which did look really good with some neat splashing water animations), I had to change the control mode. It's now been decided that Clyde will stand on some lilies that float on the surface of the water, then pull out his 'Acme Compact Electric Fan' and be blown along.



FRIDAY JULY 20TH

John: The UMOVE routine has been under some serious restructuring the last couple of days. I'm now buried under reams of printing paper. UMOVE moves Clyde around the screen, telling the scroll routine when to scroll and when not to, and handles the different control modes. The

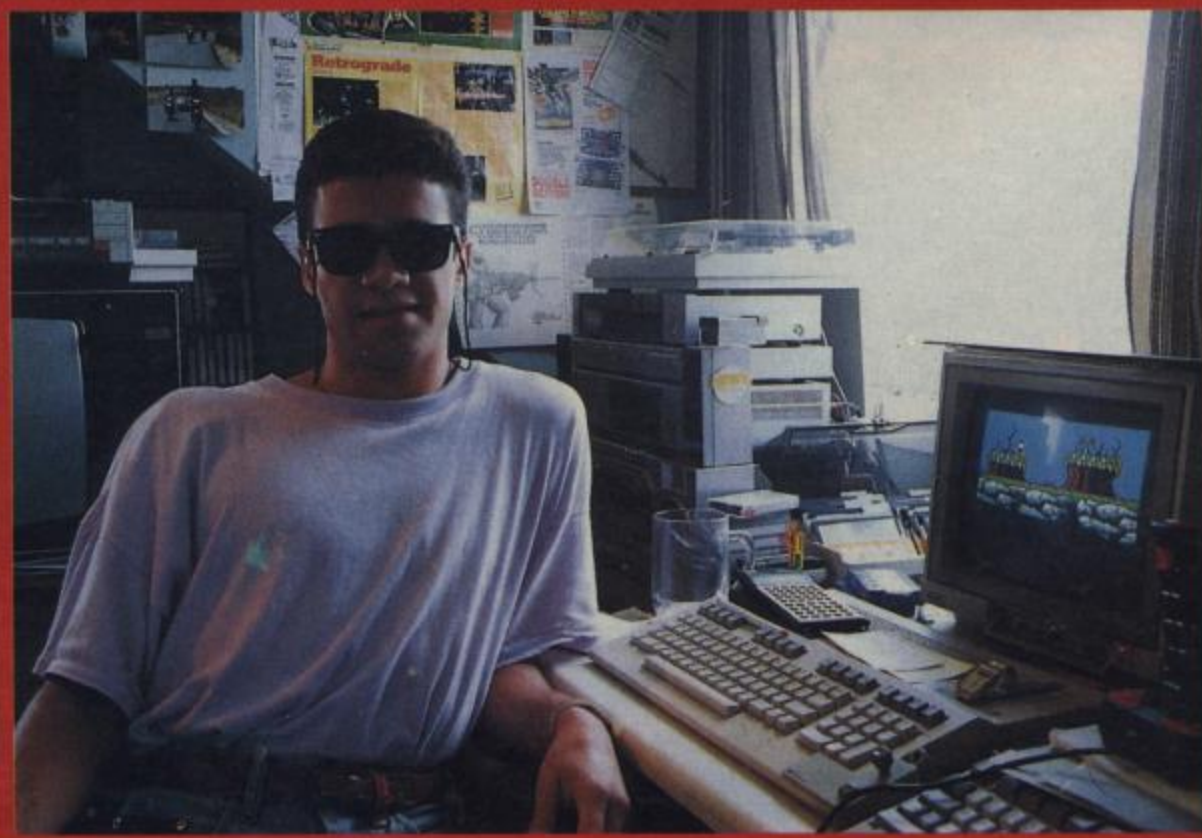
problem was it could only manage one control mode (ie swimming under water). I needed a different control for each level, so I had to rip it apart, modify it and put it all back together again. But it's done now, allowing me to incorporate as many new modes as I like, which are located within each level (therefore I never have more than the one I'm using in memory at once).

Steve: Now we have come up with the new control mode, all I have to do are the animations. I started off with the lily which tips up and down when he changes speed, then designed Clyde standing on top of it and added the 'Acme Fan' in his hand. Aliens for the Graveyard level were the next thing I did. There is a spooky two-sprite high skeleton, and I'm working on some cute little 'fuzzy-eating' goblins.

TUESDAY JULY 24TH

John: I've been messing around with the scroll speed lately, taking it up to 8 pixels every 50th of a second — which is a tad fast to be playable! The standard in-game speed is... wait for it... 1 pixel a 50th (fanfare! (how slow can you get (and how many brackets can I open in one sentence (it looks like four))))). Clyde has only got short legs ya see, so making the scroll go any faster than that would make it look like he's sliding. But when he jumps on a lily which is on the water, you've got to consider

★ Steve wisely puts on his shades before John mixes some more colours.

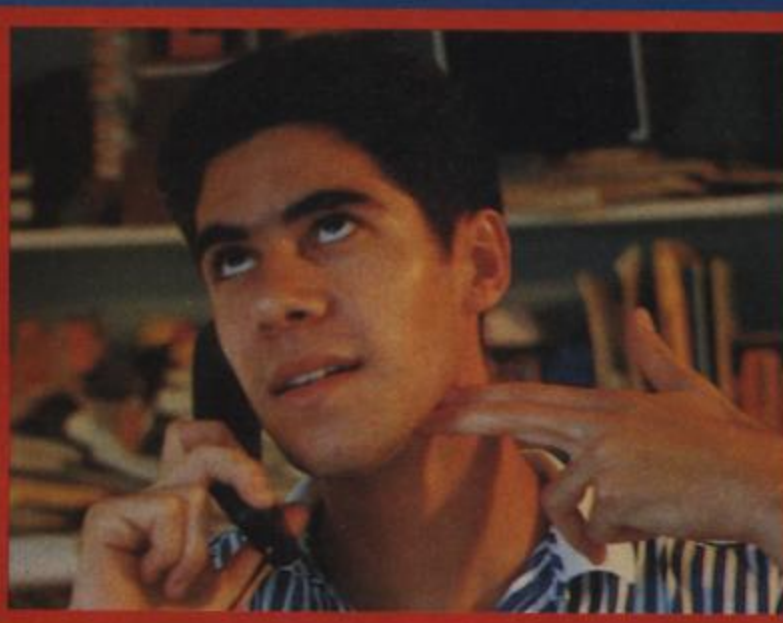


the current (well we have, anyway). As the water flows from left to right (and then down a waterfall), Clyde should move faster when he goes right, right? So I again modified my UMOVE routine to cope with this, but noticed that the aliens aren't getting sequenced properly. Looks like another debugging session is rapidly approaching!

Steve: Today is a music day. First off was the level background music for the Graveyard level, so naturally it is spooky (with bass 'n' drums) and even though it took about 3 hours to get a small bit of it done, it was worth it. While I was playing around with some notes and basses for the Graveyard level I came up with some real funky stuff which was turning into the start of a good piece of music: even though it had no role yet I'm sure we will use it in the future. I often get side-tracked during the composing of music and, as before, the original piece of music gets left to start the new bit. This sometimes happens to bits of music that were side-tracks of other music (if you see what I mean).

FRIDAY 27TH JULY

John: What? It's the 27th —



★ John learns that ZZAP! wants a Megatape demo!

not the 13th! How can this happen? Steve will explain later. Anyway, think I've fixed the 'alien sequence' bug(s).

We came up with the idea of making the waterfall roar yesterday. When I say roar I don't mean a 'ROAR with clenched teeth', I mean a quiet roar of 'water cascading down rocks' sort of thing. As Clyde gets closer to the fall the roar will get louder, and as he passes it'll get quieter. This will only happen if the player (you) decide not to have music playing for that part of the level.

Received another demo disk from Mark Bishop today, wish we could have seen it....

Steve: This morning I was doing the piece of music that I mentioned earlier but got bored with it so I saved it to disk and decided to continue doing the aliens for the waterfall level. Unfortunately when I came to load the editor it wouldn't, Ahhhhh! My disk had corrupted and I've lost all the aliens — or so I thought. I tried another disk and the same thing happened, and the same on another one. This

made me think maybe the disks were alright and maybe the disk drive was at fault or even the C128. We checked out the drive using the C64, it worked perfectly. Oh Dear! The C128 has died, blown up, crashed, gone down, blown its top, Doesn't Work!... Andy Smith said he knew a computer doctor, so we took it down to the surgery where the poor thing was put on a life support machine until further notice. The doctors were very helpful and comforting, they're looking for the problem and then with a bit of luck, the cure.

WEDNESDAY AUGUST 1ST: DEADLINE FOR CREATURES

John: Ooops, we're a bit behind schedule (a lot behind schedule — but I didn't say that). It'll be some time yet before the game's done! So it's a big SORRY to Dave at Thalamus and the lads at ZZAP! (we'll get U a review copy by Xmas, okay?)

Luckily Thalamus are the sort of company that would prefer a great game late, than a rushed game on time! What lovely people to work for (if that isn't sucking up, I don't

★ The waterfall on level one: its sound will get louder as you approach, and fade as you leave.



know what is). The C128 is still comatose at the moment. Actually, it turns out that the guy fixing it (hopefully) used to repair Sensi Soft's computers when they used to live near here. Is it a small world or wot?

Steve: As the C128 is unfortunately occupying a 'luxury private room' at the hospital, I've not had a lot to do to the game, so I'm going to use one of the Amigas. Sampled sound is on the agenda and this is much better than the 64. If only the Amiga had several more voices, a slightly better sound chip and maybe a 96 track mixing deck chucked in, the music would be up to record industry standard (we can but dream).

I've been so engrossed in Amiga music that I nearly forgot about the C128, but I just managed to get to the hospital in visiting hours with my bowl of fruit and bunch of flowers — still no change in condition.

MONDAY AUGUST 6TH

John: Dave phoned asking if we could do a ZZAP! megatape of a torture screen. He also wanted to know if ZZAP! could have a review copy of the game. Demo yes, review no. Not our fault if the game's not ready for review yet. (Actually it is, but... erm... well... err...)

Dave also told us he's ordered the furry bugs which are going to be sold with the game — what value for money (what value for money?). There's going to be some at the computer show in September as well, so all rush to the Thalamus stand and pick one up. If you see us there come and say hi/hello/yo/awright/watcha/ho w ya doin' etc etc.

Just like to give a big 'YO' to Creative Design, who have the all-clear to start the 16-bit conversions of *Creatures*. (Apologies to Pieter from Softeyes — we'll see ya at the show).

Steve: YaaaaHooooooo! The C128 is alive, restored to prime condition — Thanks Doc KPR micro. So no more Amiga music for a while, it's back to work on *Creatures*. John's started the level loading section so it's my job to do the graphics for it but, wait a minute, there's something wrong with my C128... Ahh, it's only the shift key that doesn't work, but I'll soon fix that — where's me screwdriver? (I got an 'O'level in electronics don't-ye-know).

After taking the C128 apart for the second time and cleaning the connections under the right shift key (which is no quick or easy task), I got

straight back to work on the level loading screen. This, at the moment, features a 'U'-shaped tube similar to a barometer, with the time elapsed on one side and the time remaining on the other.

WEDNESDAY AUGUST 8TH

John: Work on the game has YET AGAIN come to a standstill. This time it's the megatape demo to blame. I've got a torture screen to chuck on, but have decided not to include the 'Level Complete' sequence. Don't want to give away everything, do we now? So you'll just have to play the game to see it! (It's quite good actually). (It's brill! — Ed) So, instead of just ripping out the Level Complete code and giving the torture screen to the lads at ZZAP!, I'm going to replace it with a little 'Demo Complete' sequence. I've already filled the screen with colour splits, all I've got to do now is print a 'wot a hero'-type message somewhere. Don't know how I'll make it appear though! It'll probably be something flash — I'll think about it later and finish it tomorrow.

Steve: I had an idea to make the loading screen more colourful by putting a shading sky effect in the background. When the finished version was done it was a bit overwhelming to say the least, so I ripped it out and for the moment its back to the old screen. John mentioned that he was changing the 'level complete' message in the demo to a 'demo complete' message, so naturally there needs to be another bit of

music for that. If you don't think it's too hot then don't blame me because I was going to change it but I was outvoted to leave it be (huh, that's democracy for you). Some of you may even recognise it, but it's only a demo and not the finished game so I think we'll get away with it.

MONDAY AUGUST 13TH

John: I completed the 'demo complete' sequence a few days ago, and today I'm getting a disk together ready to post to ZZAP!

I've noticed the collision detection is slightly hard on the player, but it's already gone into the demo. I'll make a note to change it for the finished game. The disk also contains some screen shots of the game at various stages (in the shops etc).

Also sent a long overdue demo disk to Mark Bishop (our apologies again Mark — for being overdue, not for the demos).

Last Friday Andy Roberts came all the way down from St Helens (*Insects In Space?*) near Liverpool. He was up at 5am to get here by lunchtime! Being a Friday, we just had to go to a club, and by the time we got back it was 3 am (Saturday, obviously). So he was pretty shattered to say the least, and a tad smashed as well (too much Tennants Super for him methinks). Anyway, I now had to send him a demo disk too. So ONCE AGAIN the game was barely touched as I spent most of the day backing-off the game and saving it to countless numbers of disks! I'm glad our stock of Jiffy envelopes is still high though.

Steve: On the Saturday Andy was down here we thought a day out at Southend seafront would be nice (and the frequent trips to the town centre for some junk food). We had a sort of sleep in before we went as we had to recover from Friday night's clubbing. I got up about 10am but Andy was awake at about 6am (ravin' mad).

We invited Andy Smith as well as Andy Roberts to go to Southend with us (isn't he lucky?). We all piled in the car and set off in the boiling hot weather, just right for walking along the seafront. We had a good time in the arcades with me playing *Airbuster* and *Megablast*, I also got to the final screen of *Mr Wardner* and died (as usual). One of the best of the few new games around was *Smash TV* by Williams, which is a real laugh with two players.

One of the most frequently visited places (apart from McDonalds) was the pub, which sure hit the spot, even though it did take 10 minutes to get through the queue.

The day soon came to an end so we travelled home and shortly after arriving here, took Andy back to the station so he could go home. Unknown to us, Andy missed the train from Euston to Liverpool and had to wait a few hours for the next one (what a shame!).

Well that's about it for this month. We're off to Majorca in 7 days' time but we'll be thinking of you when we're lying on the beach catching some rays (not the dangerous ones, hopefully) and will return to bring you... 'The Diary Of A Good Time' in the next issue.

★ Uhm... well, I don't think I want the Super Droopy!



CREATURE FEATURE

Here it is — the penultimate instalment (I know we said this last month but this time we mean it), and with the standard 'Diary of a game' we also bring you a 'Diary of a good time'. Yes, this month we were forced to take a break from Creatures and go on holiday for two weeks. Oh well.

WEDNESDAY AUGUST 15TH

John: It's about time I worked on another level (these trees are starting to get a tad boring), so I've uploaded the first level graphics and maps into PDS. Once I had inserted this data into my source code for the game, I downloaded it back into the C64 to see if it was okay. This is the first chance Steve gets to check the graphics to see if they match up to the ones in his editor. Luckily (I didn't say that) they did.

Also contained within this data block is the 'Get Ready' scrolling map. This was where I had a problem. Unlike the previous level I was working on (which had a black background colour), this level is on light blue, representing sky. But the 'Get Ready' scrolly code was written with black backgrounds in mind, therefore it's not able to cope with light blue ones! So I've had to insert one colour split just above the map on the screen and one just below it. When the map has scrolled onto the screen an arrowhead appears over it,

indicating the position that Clyde will start. As the arrow is made up from sprites, when it appears near the bottom of the map it delays my new split. So I have to spend the best part of an hour timing out the split, keeping it rock-solid never mind what height the arrow is! Ho-hum.

Steve: Today I had the task of designing new aliens for the first level — Lily lakes, Waterfalls and Caves of slime. The morning was spent doing the 'slime monsters', which are only found in the caves of slime. Initially the ideas were sketched out on paper, then after some development were entered into sprites and animated. As the name 'Caves of slime' suggests, there are pools of slime around which is where the slime monsters are created using a type of metamorphosis.

This level still needs an alien explosion which is different from the next level and the level after. To add a bit of variety to the level I've done two explosions, one of which is similar to the mushroom-cloud explosion in *Retrograde* level one, which will only be used

on the ground. The second one can be used both on the ground and in the air.

THURSDAY AUGUST 16TH

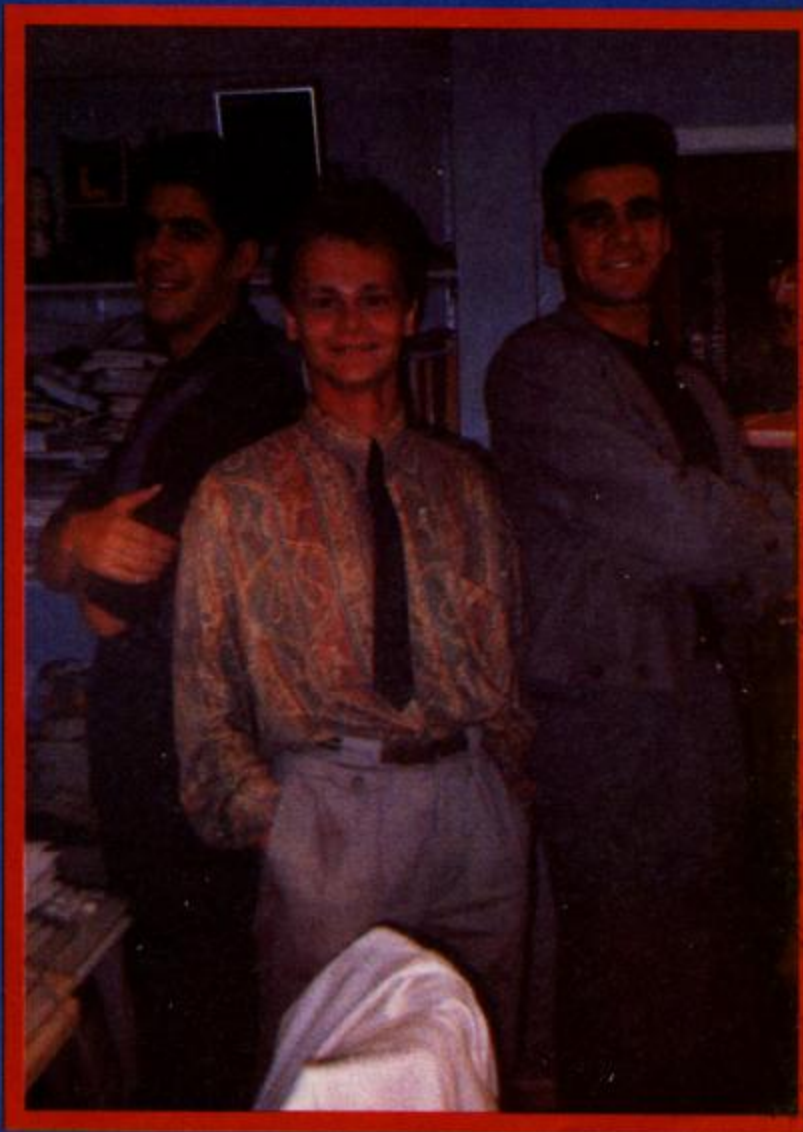
John: I spent most of the day creating attack patterns for the aliens on this level. As I mentioned a few months ago when I was typing in the previous levels attack patterns, I find this sort of thing so boring. Typing in HEX numbers all day is not my idea of fun. So, by mid afternoon I'm bored out of my mind and decided to do something else.

The thing I decided to do was the noise of the waterfall. This will only sound if the player has selected the 'Music Off' option on the 'Get Ready' attract sequence, as the C64 has only got three voices and two of them are used for all of Clyde's SFX. We thought we'd make the sound fade in as Clyde gets closer to it and fade out as he walks away. So after messing around with our SFX editor and coming up with a reasonable 'gushing water' effect, all I had to do was increase and decrease its volume. As the C64 has only got one volume register covering all three voices and not one for each voice, I can't fade it this way (unless a! the sound effects fade out... no, I

don't think so). So the next best thing is modifying the effect's ADSR values (Attack Decay Sustain Release, the basic sound envelope — Ed). By altering its Sustain, I can effectively change its volume. Which is exactly what I did, and now it's finished it sounds really atmospheric.

Steve: I'm trying to continue with the sprites for the first level but am having a bit of a hard time thinking up new aliens. I bolted together a few sprites for the large end-of-level alien, and played around with a few ideas. Finally I came up with an alien I liked, which will fly around shooting out fireballs at you. Next I went back to designing the normal one-sprite aliens and expected to be messing around with different looking aliens for ages until I did one I liked, which is what normally happens. I was surprised when one of the first ideas I did turned out well, this was a variation of a rat-type creature used on level two's torture screen. I was even more surprised to find that the idea I did next turned out well, it's the 'balloon monster'. There's a hot air balloon floating around in the air with a little monster in the basket who throws out fireballs (what a surprise!) and you have to get past it. Well

★ Robin digs out one of his more subtle shirts to go clubbing with the Rowland brothers.



I'm on a roll, I've still loads more ideas to do but time is running out so I'll jot them down on paper and do them tomorrow.

FRIDAY AUGUST 17TH

John: We received a phone call from Creative Materials this morning (the guys doing the 16-bit conversions (previous games include *Rotox* and *Days Of Thunder* — Ed)), saying that their demo disk of *Creatures* has corrupted. So I had to spend a good part of the morning getting together another demo disk (the back-up button on the cartridge didn't help me out much either, only working every fifth time I pressed it, and screwing up the game every other time).

I spent the rest of the day doing more attack patterns for the enemy sprites. Then we both had to go to Chelmsford train station to meet a mega-star. Well not a mega-star but he's getting there (so he likes to think). Yes, it's our very own (...drum roll...) Robin Hogg. He came all the way down to Essex to review a Graftgold game, and as Graftgold HQ is only 15 miles away, he thought he would accept our invitation and come over. We promised we'd take him to Southend seafront tomorrow, which is simply a mass of arcades.

Steve: Before going to the Southend arcades tomorrow we have to get through tonight, and as it's a Friday night we just have to go out. So it's the usual Friday night club, TOTS in Southend. Rob, John and I started drinking before we went out, then Andy Smith arrived but as he was driving he couldn't touch a drop. When it reached about 9.00pm we set off on the 40 min journey, pausing only to take a few snaps of us lot in a group. Rob seemed to enjoy himself but as we wouldn't get home until about 3.00am he probably wouldn't feel too good at the arcades tomorrow, well I know I wouldn't!

On the work side of things, I got the Amiga going with *Games Music Creator* and had a real good time writing some music with it (but that's not really work). Also this morning I worked on the C64, doing the *Creatures* high-score music — well I started it anyway.

MONDAY AUGUST 20TH

Spent the day packing and doing our last minute shopping, basically preparing for our holiday. We leave for Málaluf (Majorca) tomorrow, and won't be able to work on the game for two weeks. But

don't worry, as we'll (attempt to) keep a 'Diary of a good time' while we're over there.

SATURDAY AUGUST 25TH

★ What scenery! A 'cheeky' postcard from the Rowland bros!



Hot. We thought of home today and bought some postcards. Don't know when we're going write them but that's not the point. We've been to BCMs every night so far, or should that be every morning (as we don't usually get there until 2.00am and stay until about 5.30)? BCMs is the biggest nightclub in Europe, and we have already got our BCM caps to don on the beach. We've also noticed some arcades near the hotel but they're always closed as we go past them on our pub crawls at about 11.00pm each night. We'll have to go in them soon.

TUESDAY AUGUST 28TH

Damn hot. Spent the entire day at a beach party which was hot to say the least. The temperature was 120 degrees and when you're on a beach (playing drinking games all day) there ain't much shade! We got around to writing the postcards today, all we need to do now is post 'em (when we get the time). Actually thought of a good idea for *Creatures* last night but as we were both rat-faced we can't remember the damn thing (it might of had something to do with Fuzzies drowning on their own vomit)!

FRIDAY AUGUST 31ST

Daaamn hot. The elected drink to get totally smashed on tonight is a 'Green Goddess' (a mixture of

Lemonade, Vodka, Advocaat and Blue Bols), and not surprisingly turns out green. So after John's had six pints of this (and a No 33 from the chinese), he decides to do a bit of liquid laughing at the toilet (twice) and at the sink in our hotel room. And a very nice shade of green it was too.

We visited one of the arcades earlier today and found ourselves spending a couple of hours in there. All the games are a tad old but fun anyway. Some of our fave games were *Spirit Ninja*, *Operation Thunderbolt* and a cool shoot 'em-up which we can't remember the name of! We couldn't help noticing a game called *Jumping*, which looked like a direct rip-off from *Rainbow Islands* (but we didn't say that).

TUESDAY SEPTEMBER 4TH

The final day. The postcards were posted on Sunday, so everyone should (hopefully) have received them by now. We both have coughs after visiting AQUA CITY last week, and so do a lot of our mates. We both have great tans too. It's been an absolutely brilliant holiday, but like all good things it must come to an end. So tomorrow it's back to the real world and back to work.

THURSDAY SEPTEMBER 6TH

John: Having looked at the status for the first time in two weeks, I decided I didn't like the 'Magic Potion Creature' sprite. So I changed it to the ones used in the game, with it cycling through the three different types. I also did the pattern for the hot-air balloon Steve designed before our holiday.

When we finished work tonight I had a sudden urge to play *Retrograde* (don't ask me why). I haven't played this in about 6 months. Mind you, by the time I had got to level 3 I'd been playing it for a couple of hours and was feeling tired, so I switched it off and went to bed (but I reckon I could have completed it if I'd carried on playing).

Steve: After a constant 14 days of the same routine: get up, lie on the beach, get drunk, go to bed (to sleep of course), we feel a bit worn out. We could do with another holiday to get over the last one, but it was good while it lasted — and here's a big hello to Sandra from Manchester.

I'm continuing with first level sprites, and have come up with a good idea for an alien or two. There is one blob-

type alien sitting on the ground with another similar alien sitting on his head. These aliens alternately shoot out bullets which you have to dodge and at the same time kill the two blobs, no easy task!

Still on the sprite side of things, we now decided it was time to give Clyde his death routine. This will be hard as we are running out of memory so the less sprites it is the better. The best idea was that when Clyde touches an alien he squirms a bit and shouts out some sort of death word. These will change depending on how he dies.

FRIDAY SEPTEMBER 7TH

John: So finally Clyde is going to be able to die. This is going to make the game more like a game, and not a demo. As Steve said he's going to squirm as he dies. The problem is that, if he dies above ground (eg if he's jumping), you get him frantically waving his arms and legs around in mid air, which don't look too hot.

I've played countless games (including arcade games) which kill the player by animating him 'collapsing to the ground' whether he's actually on the ground or not. Now this seems pretty stupid to me, so I've added a little detection routine which will make Clyde fall to the ground as he dies.

I also had to check the surrounding terrain when Clyde dies, so if he's in water he has to say 'GULP'. He has to say 'AAAAH' and 'OUCH' normally, so instead of toggling the speech bubbles (as I initially did) I made it random. Steve wanted to put in four different bubbles, but as I'm quickly running out of memory I had to cut it down to two. Sorry.

Steve: After doing the sprites for Clyde's death the next thing is the sound effects, but just to be different we decided to make it a piece of music which starts off as a death sound effect but turns into a short ditty.

I was now taking Clyde through the first level map, it seemed a bit short for the first level so it was time to add some more. At the end of level one Clyde goes into the caves of slime, so I made these caves about twice as long as before.

While I was adding bits to the end of the map I went back and changed a few little parts of the level that I didn't really like — it has to be perfect you know.

John's got the hi-score music and wants to do the hi-score screen, so I'll have to do the graphics and window for him so he can get on with it.

CREATURE FEATURE

Here it is, the conclusive Creature Feature. It's been six months since the first instalment and we still haven't figured out the picture behind this text yet! Anyway, wiping a sad tear from our eyes, we'll get on with the diary. (Boohoo, dob, weep, wimper etc etc)

MONDAY SEPTEMBER 10TH

John: Dave 'no — not on my car' Birch phoned today asking for a 'self-running' demo of the Torture Screen, so that it can be left running at the CES show. So, I had to stop work on the game and code the demo. The best way to get Clyde running around the screen trying to complete it was to have a few pre-recorded patterns for him. So all I had was modify my 'read joystick' to store the directions in a memory table.

Steve: My quest for perfection has continued, this time the music for Clyde's death had come under scrutiny. Not that there was anything wrong with it, it's just that the new piece is much better and sounds a lot more cute.

I have just had a good idea for the graveyard level which is to make an alien out of characters and sprites. The large body of the alien will be made out of characters from the level character set and the

head will be a sprite with bullets firing out of his mouth; when the head explodes there will be the remains of the neck left behind.

WEDNESDAY SEPTEMBER 12TH

John: Spent most of today preparing demos for the CES show tomorrow. I've finally finished the 'lily pad' routines for the first level. Andy Smith suggested that once Clyde has fallen down the waterfall he should be able to go back underneath it. After I'd stopped crying with laughter I sat back and thought about it, hmmm — why not? A little modification to the map and lily pad routines and now he can. Started thinking about the hi-score entry screen today, and came up with some pretty good ideas.

Steve: After finishing the character-and-sprite alien on the graveyard level I needed some inspiration for some more ugly, smelly, decrepit, spooky kinds of aliens. After observing



★ Steve Rowlands's scary graphics for the graveyard level.

John for a few minutes and realising that I couldn't put anything that ugly, smelly, decrepit and spooky in the game, I loaded up some old games that would hopefully help me. After playing the games for an hour when I should have been observing types of aliens, I had got nowhere, except for a basic idea that I had at the start. This was to have some sort of spooky ghost floating around above the graveyard, intermittently firing out a bolt of lightning.

SEPTEMBER 13- 16TH: CES SHOW

Wot a show! So what if we're absolutely knackered? — it was fun. We saw the 'Creatures Bugs' for the first time (the cute furry bugs that we suggested could be used to promote the game) and spent half the time going through the boxes looking for the best colour schemes. The bugs went down well with everyone — when we started throwing them into the crowd they went mad, and at one stage were quite literally ripping the stand down for them! Must say a quick 'hi' to the following people... Andy Smith, Dave (Mr Ice), Carol (thanks for the warm lager, Mother), Richard, Jackie, Rob, Stu, Andy Roberts, Pieter (no more sweets!), Miles (thanks for the demos and Amiga book), Ole (we've received the interview — the photo's great), Bjorn, Stein, Jason, Marc & Sean (thanks for the music demos), Jens Christian (hope the photos come out), Mario, Stavros and 'everyone who came and chatted to us at the Thalamus stand'.

TUESDAY SEPTEMBER 18TH

John: Most of this week is going to be spent preparing a demo for Sega. So I've been going through my code looking for any bugs and have been tweaking the game slightly.

Instead of the aliens flashing white if they're indestructible, they now flash white if they are destructible. Also started a routine which fires bullets from aliens, and in the process found a bug in my 'alien type' routine. Aliens of the same 'type' share a hit count and explode together (useful for multi-sprite aliens). Only problem is not all of the sprites explode, which ain't impressive!

Steve: Well, the whole day was spent working on the first level map which was completely borrrring but it has to be done. The first map is actually finished this time and I've now started the second level but unfortunately I'm having problems with certain sections in the map. So it's time to load up the character/block editor to design the certain blocks and characters needed for making the map look extra good.

THURSDAY SEPTEMBER 20TH

John: Finished the alien bullet code, and have tested it on one of Steve's aliens — namely a hot air balloon. As I started adding alien patterns I thought I might as well carry on and create a few more. While adding rats, blobs and piggy-back creatures, I noticed the score wasn't adding up properly. Why? I don't know, I only coded it (hold on — that's the reason!). Anyway, once I fixed this and I'm going through the level testing, I'm starting to think that this is a tad on the hard side. We decide to add an 'extra-life pickup' facility to make the game a smidgen easier.

Steve: I'm continuing with the level two map and it's definitely better than level one. Level one's waterfall was good, but level two's is about one-and-a-half screens long. I've been a little bored doing these maps so I think I deserve a welcome break; some music is in order. I've been working on this music and it's turned

out real cute, it will probably be the level loading music as the memory is quite low at the moment, about 300 hex bytes.

SUNDAY SEPTEMBER 23RD

John: Whilst showing (off) some of the new creatures on stage one to Andy Smith I noticed yet another bug which screwed up the movement patterns of some aliens if others were shot, but I didn't have the slightest idea what was causing it.

That's right — it's 'MASSIVE BUG' time...

Phew, I'm shattered. I've been working on this bug for eight-and-a-half hours and it's now early Monday morning. But it's done, and all because the label 'B' was three lines too low.

Steve: Pausing one moment from the music, I designed two score sprites, 200 and 500, which you receive when you kill a really difficult alien. Back to the good old music and as usual I was working on the level loading music but got carried away and branched off onto another piece which is also pretty damn hot and will, when finished, go in as game loading music. There is one thing I try to get away from when writing new music and that is always having the same instruments.

TUESDAY SEPTEMBER 25TH

John: I started another Torture Screen today, by ripping out all the code I don't need from the previous torture screen (eg specific animation routines) and leaving in ones I will need (eg level complete routines). If all goes well it should turn out better than the previous one. As Steve has already done 95% of the graphics for it, it shouldn't take too long to finish coding it. The one on the Megatape took about four weeks to do, including all the universal movement and animation subroutines, level complete routines etc. I want to get this one done in two (wake up John, wake up).

Steve: This morning I was working on the second level maps for a few hours, but when John had given me the first level alien map editor I started doing them. The first multi-sprite alien in the game is the balloon monster which has a technique used to make the hanging basket look more realistic. There is also the piggy-back monster in the level now: you may find it a bit hard to get past at first but it is all in the timing of the bullets. With all the aliens so far I have

found myself using a lot of Mixy-cols and to good effect I might add.

FRIDAY SEPTEMBER 28TH

John: I came up with the idea of starting some music when the time limit reaches 15 seconds, therefore warning the player. It's sort of 'hurry up' music, a bit like the music on 'Countdown' (Channel 4). Obviously none of the time limits for the levels have been set yet, but we'll get a load of our mates to playtest the game and finalize the times. It's no good just us playtesting the game as we've been playing it for months and are therefore quite good at it (well that's the theory), so we have to get a selection of people to play it, and give us their opinions and suggestions.

Steve: I was doing the alien maps on level one until John interrupted me and asked, pleaded, begged for some music to go with the 15 second warning. To make the music sound like a hurry-up it steps up the pitch every second until you die, and all this in 68 hex bytes. So after that it's back to the aliens and then some work on the second level map which gets better and better. After putting the timer music in the game and hearing it for the first time in its actual place we both thought it could do with adjusting. So I stop what I'm doing again to make it better and save 4 bytes in the process.

TUESDAY OCTOBER 2ND

John: Since the start of the game, there's been a nasty little bug to do with the colour update on the scroll. Once every screen there's a heavy increase in processing time for the colour scroll, but unfortunately it's not fast enough and as a result, a nasty 'flickering' occurs at the



bottom right of the screen. For months I've been meaning to fix it, and now's the time. In the end it only took 20 minutes, and improves the feel of the game a lot. We've started to plan the title sequence and the game complete sequence. With 21K for the latter, it should be quite impressive.

Steve: Work on the second level background maps stops once more as we are putting together half a dozen demo disks for Dave to show various people for various conversions. Before I can continue with the aliens on the first level I need the new game code. The version of the alien editor I have doesn't let Clyde jump around on the lily, it just locks up. So until John sorts it out I'll be back on the second level map and starting the third level maps. This also means designing new aliens for the new levels but I can cope with that.

THURSDAY OCTOBER 4TH

John: This is the first time I've worked on the torture screen since starting it a week ago, and I've got a hell of a lot done. All the character animation routines were done today, the acme jack, see-saw, cannon etc. Tomorrow I'll overlay the required sprites and animate them. Just a quick thanks to

Miles Barry whose been sending us dozens of demo/utility disks since the show.

Steve: Even though I had done a lot of the torture screen graphics already, I still needed to spend a lot more time working on a few new ideas that we had thought of while John was coding the screen. We had put a blob-type alien with feet near where you start, and when you shoot it it rolls towards you and then back again. The characters and window have been changed drastically and a lot more detail has been put onto the background now that it is in a near finished state.

MONDAY OCTOBER 8TH

John: The Torture Screen is very near completion, with only the death code for the fuzzy to be rescued to be added. It was originally going to be a swinging blade suspended from the roof which sliced the Fuzzy open. But we decided to change it, going for something a little cuter (and sicker). We're not going to mention what it is as it's a surprise!

Steve: Back to the levels and I think the background maps on the graveyard will be next, but first I'll have to do all the characters that will be used for the 'get ready' scrolling map. With most of the fronted code, graphics and music done, and a lot of the levels completed, the game is quickly approaching a reviewable state. *Creatures* should (fingers crossed) be released within the next month.

Creatures has been created with help from the following: Dave 'silky' Birch and his extended deadlines (and loadsahype), Andy Smith, the ladz at ZZAP!, Andrew Roberts, Miles Barry, PDS, JMJ, TOTS & Hollywoods, Bud. & Tennent's Super and, of course, the discovery of Fuzzy Wuzzies... remember, Clyde needs YOUR help!

★ A misplaced Clyde stares out of the screen on load one.

