Here we are, issue two and money in the bank, I’d like to say thank you to all those who have had a little faith and coughed up their £5.50, and to those who haven’t—it had better be in the post or we’ll send the boys round.

As you can see we still have no name, the best attempt so far is ‘POKE 85495,6 for a Good Time’, obviously the incentives aren’t great enough to get your names off the list, so, if Sisil Software have kindly donated some of their tapes, I’ll offer a prize for the best name of a complete set of their range. On the subject of prizes Paul is offering two microdeal ‘One Pound Discount’ vouchers for the best routine for transferring AUTOGRAPH programs from tape to Dragon Disc.

Quite a lot has happened in the last month, and by the next edition we hope to be offering members discounts on various products. Touchmaster have been contacted unofficially and seem quite enthusiastic about a national group and even our local group. Going up is the 6709 users show for Dragon and Sisil users at the Royal Horticultural Halls, I intend to be there on at least one of the two days—hoping to both and find March will have some kind of presence there. All this may seem a bit splendid at the moment, but by the next edition (yes there will be an Issue 3) we hope to have much of this sorted out. Until then keep up the good work—we need more members and more articles, especially for ‘Find It’ so get busy.

A PRINTER FOR TWENTY POUNDS
BY Peter Williams (sorry about last month—ed)

In part 2 we discussed the various problems to be overcome when using a teleprinter terminal as a printer with your Dragon. This month the method of converting ASCII 8 bit to Baudot 5 bit will be explained.

First the Dragon sends a character to a printer from its parallel interface port as a 5 bit parallel byte using the universally accepted ASCII code. For example the letter A would be sent as 01000011 binary, which is 65 decimal or 41 hex. The Baudot code for the letter A is 11000 but the normal convention in telegraphy is to replace bits as blank and space, the letter A is therefore described as 1001.

A system using a 5 bit code can only recognise a maximum of 32 characters so teleprinters use two modes, Letters and Figures. For instance the code 00000 can either be the letter 0 or the figure 0. The teleprinter needs to receive the appropriate ‘figures shift’ or ‘letters shift’ first to put it in the correct mode.

The easiest way to convert from ASCII to Baudot in software is to set the table of the Baudot values in the same order as their ASCII equivalents. The ASCII value of the printed characters run from 32 (space) to 93 (2) so that if 32 is subtracted from the ASCII value it tells us the position in the table of the equivalent Baudot value. The table of values is shown in figure 1.

The column headed HEX in the table is the value we can store in the Dragon memory that will convert most easily to marks and spaces. In binary format they are sent the least significant bit first which explains why 00000 is stored as 03.

Some of the ASCII characters in the Figures column of the table are not included in the teleprinter type font. The table shows these as...
which is the code for space, but it is also possible to have a more complicated programme that will overprint two of the available teletypewriter keys to produce an approximation of the missing character. For instance, we can get a dollar by using $ and / or a close match for hash using = and /.

With a suitable machine code programme we can intercept any character being sent to the printer port and, by using the table, convert it to a different character which can easily be changed from parallel to serial by some added hardware.

Future articles will describe this hardware and also look at some of the other functions that can be included in the software.

**Fig 1. Table of ASCII to Baudot conversions.**

<table>
<thead>
<tr>
<th>FIGURES</th>
<th>LETTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHR</strong></td>
<td><strong>ASCII BAUDOT HEX</strong></td>
</tr>
<tr>
<td>32</td>
<td>SPACE 00</td>
</tr>
<tr>
<td>33</td>
<td>EXCL 01</td>
</tr>
<tr>
<td>34</td>
<td>QUOT 02</td>
</tr>
<tr>
<td>35</td>
<td>AMPS 03</td>
</tr>
<tr>
<td>36</td>
<td>APOST 04</td>
</tr>
<tr>
<td>37</td>
<td>PAREN 05</td>
</tr>
<tr>
<td>38</td>
<td>CRIB 06</td>
</tr>
<tr>
<td>39</td>
<td>LSQB 07</td>
</tr>
<tr>
<td>40</td>
<td>RSQB 08</td>
</tr>
<tr>
<td>41</td>
<td>LSQU 09</td>
</tr>
<tr>
<td>42</td>
<td>RSQU 10</td>
</tr>
<tr>
<td>43</td>
<td>LSBD 11</td>
</tr>
<tr>
<td>44</td>
<td>RSBD 12</td>
</tr>
<tr>
<td>45</td>
<td>LSATS 13</td>
</tr>
<tr>
<td>46</td>
<td>RSATS 14</td>
</tr>
<tr>
<td>47</td>
<td>LSQU 15</td>
</tr>
<tr>
<td>48</td>
<td>RSQU 16</td>
</tr>
<tr>
<td>49</td>
<td>LSQU 17</td>
</tr>
<tr>
<td>50</td>
<td>RSQU 18</td>
</tr>
<tr>
<td>51</td>
<td>LSBD 19</td>
</tr>
<tr>
<td>52</td>
<td>RSBD 20</td>
</tr>
<tr>
<td>53</td>
<td>LSATS 21</td>
</tr>
<tr>
<td>54</td>
<td>RSATS 22</td>
</tr>
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<td>55</td>
<td>LSATS 23</td>
</tr>
<tr>
<td>56</td>
<td>RSATS 24</td>
</tr>
<tr>
<td>57</td>
<td>RSBD 25</td>
</tr>
</tbody>
</table>

**PROBLEMS**

1. R.S. McDermott "Has anyone got a data sheet for the AM7910 modem I.C. and/or circuit sheets for the Dragon 56"?

Try multisoft for the AM7910 sheets and we'd like a set of Dragon sheets ourselves.

2. R. McDonald "As far as I can see DREAM will only support five characters in the FCC function. Is this right? I am not too clear how to load and store the contents of an FCC function. Any advice would be appreciated.

DREAM will support more than 5 characters in the FCC/FCD function. It may only be saved/loaded as part of a DREAM file as it is an assembler directive only. Warning, early copies of DREAM had two serious bugs.

3. Harvey Wyman would like help with his Delta DOS, if you can contact him via the editor."
In this issue I have decided to concentrate on Salamander, the main reason being that they are offering a discount on Dragon software at the moment.

I suppose you could say that they are most famous for the "Dan Diamond" trilogy which actually isn't bad, the first part "Franklyn's Tomb" as one of the first adventures I tried. I quite like it and it stands as one of my all time favourites. I think the reason is because of the booklet supplied which gives the programme much more atmosphere. The adventure itself has a feeling of it's own and would work without the pictures. I like humour in a game and this has it - mind you I've a warped sense of humour anyway. The programme is in BASIC but this does not hinder the game as it is quite fast in response. The following parts 'Lost in Space' and 'Fishing Business' are in machine code, I didn't like these as much but for £7.95 they are good value.

Wings of War is a totally different adventure being set in WWII, you have to capture a bomb and its plane and return to base. The game is spoiled a bit by being totally illogical at times and it's a fair bet that you will need a help sheet, if only to find out what to do with the gas mask, against this at £4.95 it's good value.

For all you golfers out there Salamander do a nice line in golf simulations, it's called "Golf" (oh well). Having seen Dragon Don's offering (in Y/C) it's streets ahead and all in BASIC too. The action takes place in Hi-Ras and the choice of clubs is quite good. I have never played Golf for real but this programme has given me a taste for it. Recommended at £3.95.

There are loads of flight simulators on the market for the Dragon (one day I'll do a whole corner on them), but "Nightflight" isn't one of the good ones. The programme takes place on the text screen. The differing controls are quite extensive but I don't enjoy looking at the view which is, I feel, one of the most important things in a simulator. For £2.05, definitely so-so.

"Cricklewood Incident" is not mentioned in the new prices, and I've never played it anyway so you take your chances on that fellow sleuths!

I didn't know whether to include "Wizard War" because it is not strictly a simulation, (do you know any wizards apart from Galgoish and Oddle?) but it is strategy so I'll stretch a point. Having written all that I think it is rubbish. It's very much a love-'n- hate-'n-like Shards "Empire" (I don't like that either) but an advantage is that all the family can play, as long as there's no more than nine! At £3.95 maybe, but £4.95 - well it does come in a big box.

Bob Laughton wrote in asking for help in Shenanigans, his problem is trying to get past the sargeurs, from other people I have spoken to this seems to be a common sticking point. The answer is to find out what is in your mail and then "show" it to the offenders, if you can't get into your box try to think of where room numbers are found - it is so logical that it takes some to work it out!

SECURITY ROUTINE
by Myffin Jones

This is a routine to give security to your programmes and stop them from being ripped off! To use it effectively you must couple it with an autora routine for the programme, a suitable one is given in the July edition of "Dragon User" although you will need to relocate the code in one or another of the routines as they try to use the same memory space.

The programme works by changing the meanings of various commands, (for example POKE 65305,0: POKE 113,55
1 POKE 65305,0 : POKE 113,55
2 POKE 411,228 : POKE 412, 203 : POKE 413,4 : POKE 414, 237 :
POKE 415,228 : POKE 410,233
5 CLEAR 293, 32620
6 A = PEEK(291) * 256 + PEEK(292)
7 FOR I = 0 TO 117: POKE 32650 + I, PEEK(A+I): NEXT
8 POKE 32682, 134: POKE 32692, 22
9 POKE 32692, 157: POKE 32693, 97
10 POKE 32700, 102: POKE 32701, 131
11 POKE 32702, 157: POKE 32703, 97
12 POKE 32705, 157: POKE 32709, 97
13 POKE 32726, 142: POKE 32727, 170
14 POKE 32728, 157: POKE 32729, 97
15 POKE 32730, 142: POKE 32731, 157
16 POKE 32732, 153: POKE 32733, 101
17 FOR I = 0 TO 6: READ A$: POKE 32621 + I, VAL("G" + A$): NEXT
18 DATA 0E, 7F, 0A, 0F, 01, 23, 39
19 EXEC 32621
20 TRON 65305, 20
21 REST OF PROGRAMME

Notes. Line 1 disables the keyboard and causes a cold start on reset, line 2 disables the BREAK key, 3 sets the RAM-top, 465 copies the reserved word list into RAM, 6-14 change around the reserved words, 15 diverts the execution of commands to the altered reserve word list, 17 executes the diversion, 18 re-enables the keyboard.

To use the security routine:
a CLOAD "SECURITY"
b POKE 100, PEEK(25): POKE 101, PEEK(26)
c POKE 25, PEEK(27): POKE 26, PEEK(28)-2
d CLOAD "PROGRAM"
e LIST 20
f POKE 25, PEEK(100): POKE 26, PEEK(101)
g CSAVE "PROGRAM"

This should now give you a saved 'version 2' of your programme on file with the security routine at the beginning of it.

PIXEL PARK

Crazy Painter from Microdeal

Well done Microdeal! I liked this game a lot. You have a choice of colour screens, joystick or keyboard control and many different levels of play. The object of the game is to paint the floor with your brush which continually runs out of paint. You have a can at the bottom left of the screen with which to refill it, however to stop all this excitement all sorts of little nasties from dogs to caterpillars run across the floor wiping out your handywork as you go. As you carry on through the levels-of-play, paint gets in shorter supply and it's even known for one or two the nasties to nick your brush!

<table>
<thead>
<tr>
<th>Entertainment value</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphics</td>
<td>70%</td>
</tr>
<tr>
<td>Sound</td>
<td>60%</td>
</tr>
<tr>
<td>Presentation</td>
<td>75%</td>
</tr>
</tbody>
</table>

I can recommend this one for the non-zappers of this world.

Gerald Hale

Chuckie Egg by AGT Software

I must admit I am not, nor have ever been, an arcade fan, that's one of the reasons why I am never any good at them. That said "Chuckie Egg" is one of my favourite programmes, why I don't know -maybe it's the sheer lunacy of the plot where you have to go around picking up eggs and hiding them from hens, or maybe it's because there are ten different screens -I'd better explain the game so that you won't think I'm too mad.

You are a farmer trying to pick up the eggs lying around the hen house. There just happen to be various obstacles in the way; these include
those infuriating hens, moving lifts, and gaping holes in the floor. After
screen ten a mad flying duck starts to chase after you. Mind you, as yet I
haven’t got this far although my next door neighbour has - I tell you it’s
panic stations when that duck takes off!

It all happens in PHOEBE 2,1 Screen 1,0. I personally find this the
best colour scheme that is available. Instructions are in PHODS4. This is,
in itself, a nice touch in that you don’t meet the text screen at any
stage, it gives the programme an air of professionalism. The graphics are
very good; the farmer has four positions and the hens three.

Control is via the keyboard and this is really my only complaint, the
programme will accept up to four players but you have to move your Dragon
around, this is a bit annoying - especially with a loose transformer plug!
The keys can be redefined but I found the four arrow keys and the spacebar
(for jumping) the best layout. Movement of the characters is smooth and
very quick; the only time you get flimsy is when the farmer is right at
the top.

Screen seven is the one that I always get stuck on and trying to time
the jump onto the lifts is murder.

If ‘Chukie Egg’ doesn’t become a classic with Dragon owners then there
just ain’t no justice in this world, great value at £7.90.

Neil Scroggour

GROUP DATAFILE by Cable Software

Send the wife away for the weekend for this one. This simulation
programme was presented with a clear instruction booklet and a card to
place over the Dragon keyboard to assist you in playing, but you will need
to spend a lot of time mastering the rules of the game before you start. I
haven’t space to outline all the bits of this one - but if like simulations
then you’ll enjoy this one. Primarily I am not too keen on these long drawn
out affairs, but then I haven’t managed to send the wife away, any offers?

Entertainment value 65%

Graphics 60%

Presentation 75%

Recommended for eggheads!

Gerald Dale

REDDUNDANT INFORMATION

First a warning - whilst all these codes work on some Dragons it is
unlikely they will on all, and may well crash the machine - so take care.

POKE 55301/3/5/7/9,0 disables the Keyboard, POKE a value of 20 to
re-enable.

POKE 65695,0 doubles speed of processor.

POKE 65694,0 returns it to normal.

POKE 113,55 causes a cold start on reset.

thanks to A. Kyffin Jones.

LETTERS

All power to your elbow in starting the User Group, let’s hope it lasts
longer than Dragon World!! I hope that as a Group it
will be able to speak for Dragon Owners and bring pressure to bear on
whomever needs to know.

I am disappointed at the lack of support in terms of software in
comparison to inferior machines, particularly the BBC and Spectrum,
especially in terms of business programmes. What software there is it for
less good than that available to BBC and Spectrum....... SANS!!

I will be happy to review any of the business or other programs that I have.

Anne Hillstead

(We hope to have a review of Anne’s in a later issue.)
Next comes a letter from the 6809E Dragon Users Computer Club, the Dutch Section.

Subject: MC6847 and Extended Basic (EB)

What we really need in upgrading the performance of the Dragon 32 664 is a
VDS Romschip that contains all the upper and lower case characters and
colors and self to define colour sprites, plus a text screen that is not
32 by 16 but 60 by 25, so that you can use an assembler like ALLRDMAII and
fateful software in really worthwhile application modes.

I mean normally a printer has 80 columns so why does not my
textscreen? Especially when the chip has all the possibilities, so it is
to me a completeiddle why they, DD, adapt the DD and upgrade the VDC
display. Put the DD on top of RAM and not in the middle and e.g. on
cassette. (Independent Programming).

When you put a new home computer on the market you have to have a
forestatt of things to come, so your product has some built in features
which taste and do not crack when newcomers arrive (Spectrum, Electron,
Atmos, ITX, ZX &c.).

I have written letters to DD and Dragon User about this only DD gave
me good wish and asked me if I will support the product, Dragon User so
far gave no sign of response.

Now when you are a BASIC user or a newcomer to the world of computer
programming you are not really left in the dark about graphics
possibilities. Atari claims it has 11 graphics modes in the xmx/480 XL
series, but the 32 664 has 14! Only when you are dabbling in H/C you are
able to use all these modes, now only 7 in BASIC

On the other hand we are fortunate by Commodore standards, they nearly
have to POK3 the brains out of their machines!

Maths like to have your response on this item and do thank the both
of you for putting me a heart under the belt for continuing the support of
all dragon owners, for the 6809E is the H/C microprocessor right now and
not the 2-85’s.

Klaarten Van Damelen

Lastly we have Neil sticking his ear in and stirring it about.

Just before Christmas Oasis Software brought out their Sprint compiler and
it seemed to be the answer to all Dragon owners prayers. There were
virtually no books at the time on how to write 6800 machine code and so it
seemed that Oasis were onto a good thing.

I hurriedly sent off my £14.35 and back came my saviour of machine code
routines. The actual program itself is quite good although it does take a
long time to compile and there are some limitations. However a friend and
I got together to write some programs that could be compiled we intended
to release them onto the unsuspecting world.

But we became very disappointed when we were told that Oasis wanted
£200 royalty for each program. How this was never mentioned in the
Instruction book (well I can’t find it). Mind you it was there program we
were using so we understood. Unfortunately we didn’t have £200 so our idea
was shelved.

Six months later Oasis brought out “White Lightening” for the Spectrum
which was copyright cleared! How come? Oh dear, we Dragon owners helped
you to get started so come on and help us. Contrary to belief not all of
us can write hex 3 hours a day.

Neil Segrinseour

DRAGON ADVENTURES
by Pauline Hampson

Here are my recommendations for all budding adventurers. Please try to
start with a fairly simple adventure so you do not get put off as I was by
“Madness and the Minitour”.

Neil Segrinseour
I do hope that you will find copies of the games in the shops. At present all Dragon software seems to have miraculously disappeared, finding any could be an adventure in itself.

Start with "Dragon Mountain" a straight forward adventure with few traps or tricks in an underground location. From here you can progress to "Jerusalem" or "Williamsburg Adventure". These are fairly short but take some thinking about.

The next group of adventures which I really enjoyed are the Franklyn trilogy. These comprise "Franklyn's Tomb", "Lost in Space" and "Fishy Business". At present Salamander are offering them at a discount so you could be in for a real treat. The first two games are written in BASIC and the third in machine code which gives a slightly faster response. I mention this because I hear that some unscrupulous people actually examine the BASIC listings!! (well I got stuck -ed.) The adventures all come with a booklet showing each location as a picture. All these games were really good as most thought provoking. I sincerely hope that one day Salamander will produce the long awaited sequel.

The next two adventures include pictures of locations on the screen, with text underneath. I am not strictly fond of graphics in adventure games but "Sea Quest" and "Shenanigans" are really quite interesting. Make sure you look at the pictures!! "Sea Quest" involves finding treasures, going diving, sailing a boat and using a metal detector. "Shenanigans" at first seems very dismal starting in an apartment, including streets and luggers. Keep going and it transforms into a good game which (sorry Neil Burgesoes) I think is quite difficult, you end on a rainbow.

I can also recommend "Salixto Island" and "Black Sanctum" which I understand are good for Dragon 64 owners. I enjoyed the text versions. "Black Sanctum" delves into spells and black magic and takes place in an old monastery type building.

My favourite selection and also the hardest is "El Diablo" it really is the best one I have ever played. Its scenario is a desert with a canyon. There are lots of very similar locations in the game so good mapping is essential. Please try it, I can rarely help out.

"Keys of the Wizard" is also a good game but not in the same style as most of my favourite games. You have to use weapons and fight your enemies. The object of the game is to deposit treasures into the Sanctuary (if you can find it) to try to obtain a maximum score. You could ignore the enemies if you wanted and run away, but each holds a treasure. The locations of the game are endless with 3 main "floors" each of 64 locations and 3 races. There are also one way passages to contend with and it can be difficult. To go from one part to another until you find your way around. You really will need a map. Typing quickly can also help because you only have a limited time to type "MASH ORC" etc. and then he gets his reward.

Can I make a special plea to anyone who has played this adventure. I would like to mention any tricks or tips which you have discovered. "Has anyone found a use for the spade? Who can open all chests and boxes? There are the ballroom and kitchen? Is there a room between the empty chamber and the statue room south of the chapel? Can you kill the unicorn? The game raises so many fascinating questions.

I recently obtained a price list from Microdeal and noticed that they were now selling Dragon Dungeon software for £1.99. At this price try "Crystal Chalice" and "Temple of Soron" which are interesting but slightly different adventures and worth every penny. Try all the directions and not just the ones stated!

Well I hope you will all go off and have some fun, I'll just go and CLEAR "Keys of the Wizard", I've got an hour before tea.

CLASSIFIED

Paul wants to swap one mint condition Salamander DAS system for any good accounting program. He is also willing to pay for any Bent, Burnt or Duggered (his wording) Dragon Hardware that he can use for spares, so if you have a defunct Dragon give him a ring.
For Sale: Realistic CT2-57 Cassette Recorder with remote...£10
Book—Dragon Extravaganza, 50 programmes for the Dragon by Roger Valentine
£3. Both from Mr. Gerald Holle on Crawley 36413.

CLUBBET

Firstly an apology to Ashley Adamson of the Romsey area Dragon Users Group whose name I managed to get wrong in the last edition, sorry Ashley. The Romsey group meets every weekend and holds occasional trips out to exhibitions etc. In addition they publish a fortnightly newsletter and membership is just one pound p.a., can't be bad. Anyone in the area should contact Ashley at St. Elm, St. Elmo Lane, West Hellow, Romsey, Hants, S05 0DD. And now for the rest.

For £10 addicts try the
519 Users Group,
c/o Paul Mills
23 Metcalfe Road,
Leytonstone,
London
E15 7EL

For £20 addicts try the
7.6. Pixels' Sussex group can be found:
c/o Multisoft Systems
St. Martin's
Orchard Road
Bexhill-on-Sea
Sussex.

The N. Down Microcomputer Users Group, ring Eddie Dook on 0267 450952

Skegchifield Dragon Users Group,
c/o L. Grantham,
181 Herrington Horse Valley Road,
Rotherham,
S. Yorks,
S65 3QU.

LETTER FROM THE CHAIRMAN

From the replies we’ve received it appears that most of you think that we’re making a good start with the Group Newsletter, and although this month’s issue may not have grown much we hope that by the time the next one is published things will have improved in both size and quality, although please don’t forget that most of the contents depend on YOU. There is, however, one small snag...HONEY!!

I know that many of you have sent in your forms; and paid up, but a few seem to imagine that all they need to do is wait for the next ‘free issue’ to arrive. Sorry, but I have to inform you that as of now, there won’t be any more free handouts!

It’s not that we’re mean, it’s simply that it would be most unfair on the paying members if we were to use their subscriptions to subsidise freeloaders. You wanted this group, and us we’ve done our best to get it started; we want to build this group into something big enough and good enough to be of REAL use to all of you, so please, give us the chance to do so.

Just in case anyone out there thinks that Jeremy Royland or I are living in luxury on the proceeds, I regret (I really do!) that like our contributors and reviewers, we’re not getting paid at all, and all money received goes towards covering legitimate expenses such as phone calls, postage, printing etc.

In the unlikely event of a cash surplus at any time, we’ll publish the figures and ask for your views on how the money should be used. Here’s the Financial Times!

Thank you for all your help and support. Don’t forget that we need more ‘recruits’ and more material for publication, whether it’s reviews, letters, problems, general articles, complaints, or anything else you’d like to see in print... (the laws relating to libel and obscene publication permitting!!).

Paul C.