

USER MONTHLY

with Oric Enthusiasts

Europe's longest running Oric Magazine

Number 62 October 1992



HELLO and WELCOME, to this the October issue. computer is generally stored for As a leisure pastime, the away summer months, but due to the inclement weather, you all seem to of busy. Programs, articles and letters have been flooding in.

This has caused a bit of a backlog, but as I have a week's leave at I during the middle of this month, then I hope to catch up - for a while!

The last issue of O.U.M went out to 114 readers. The mailshot continues. A big thank you to new subscribers for sending in articles etc. It is nice to see new names amongst the familiar Allan, Jon and Peter.

Speaking to Allan Whittaker the other evening, I asked him how many

oages there would be in his article for this issue. He said about 6 including his price list. Great!, I thought, I'll get away with typing bit less for this issue. Then I thought, well I'd better put this in a I'd better do that etc. The outcome will be another huge issue. Not and as big as the last double issue, but still plenty of variety. Of course I've had to leave a few things out e.g. THE A to Z of Software Houses and my further look at LORICIELS. I felt we had enough on software in this issue.

Well, on we go with a glimpse of what to find:-

THE IMPEX

Page 1 - The Cover from Jon Haworth

Page 2 - The Editorial and a bit more

Page 3 - News. News . News

Page 4/5/6/7 - RAMROM - Jon Haworth gives the Dissassembly a break look at his Foreign software.

Page 8/9 - TAPE TO DISC - Colin Cook

Page 10/11 - THE GAMESTER

Page 12/13 - The first part of 'THE BOTTLE' listing.

Page 14 - Readers' Letters

Page 15 - A Glance at Scandinavian Software (Pt.2) - Arnt Erik Isaksen

Page 14/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 - Machine Code for the Atmos (Pt.12) - Page 18/17/18 -

Page 16/17/18 - Machine Code for the Atmos (Pt.19) - Peter Bragg.

Page 19 - BITS and BOBs

Pages 20/21 - Quickies and more quickies from the Editor. Pages 22/23/24/25/26/27 - ORIC ENTHUSIASTS - Allan Whitaker

THE CHARTS

In the next issue we will print a list of the best selling software 1992 to date. Glancing quickly the most popular at present appear to TETRIX, WORDSWORTH and ZEBULON.

If you want a readers chart then please send your favourites time I asked, the response was very poor. If you want to send in, tell us your top 3's in Arcade, Adventure, Strategy and Utilities.

A TOP THEEE

What are the favourite games of publicity officer Brian Kidd? Brian tells we that they are:-

1) TIC - TAC

2) TRIATHLON

3) XENON III

A PLEA TO SHIRE

Judy Simms and Paul Baker both have the same plea to Andre Widhani. How can we slow down the blocks in the later stages of your fanatabulous game TETRIX?

that I can the about dropping me line so Dass Well Andre, how information on! ______

A NICE PHRASE

A nice phrase in reply to my mailshot to Mr. Clarke of Shrewsbury thought all Atmos owners had gone to the big ROM in the sky". Well Mr.Clarke, we are not all that old. After the last Oric Meet, some of our members survived the day without the aid of the Oxygen tent!

THE DUM DISC

Those who expressed an interest will find ,with this issue of O.U.M, the very own OUMDISC1. In fact those on 3.5" and 5.25" will recieve 2 discs I wanted the MORSE TUTOR program from Denis Bonfield to be separate as can store information. Those on 3" disc will find it in the 'B' side. Al it side. Also on your disc (amongst others), is a database program which will need a SEDORIC formatted disc to store your data. You may of course wish to transfer the program to another disc. In which case, please be aware that a QUIT is needed prior to running it. As the program is in Basic, you may even transfer it to a DOS of your choice.

Rather than 'bore the pants off' the cassette users by spending a who page on the disc; I will print little hints etc. on the programs on disc throughout the issue. Therefore disc users will have to read issue thoroughly. Alternately I may decide to send you a separate guide.

As I type this page, I am still working on the disc, but to date there nearly 20 programs on it.

Those who still wish to order should send 3.50 for 1 x 3" disc or 2 5"/5.25" discs.

A huge thank you to those who have contributed to the compilation who are readers that is!)

DABS PRESS

In the last issue we printed an ad. for DABS PRESS who sell 3 .. discs.

I checked them out and they say that the discs are MAXELL. I wanted to buy 3 boxes of 10 and asked for discount. After an inter-departmental inter-departmental conference, they agreed to give me ONE POUND OFF the TOTAL order. Even with carriage and V.A.T the price on 30 discs works out to around 1.40 each and represents a good buy. They did say, however, that 7 days was needed to clear a cheque. I twisted their arm and they decided to waver this clause. If you don't get your OUM disc with this issue, you'll know it was all" Bull"!

"ORIC - THE STORY SO FAR"

Good news for historians is that Jon Haworth is planning a follow-up to his best-seller entitled 'ORIC - The story so far'. For those who don't have the first edition; it is still available direct from Jon for the meagre sum of 2 pounds, which by now is probably about 1 Deutschmark!

It is an excellent read.

ula Kil His IMBEX

Where do I find a review of JUMPFOX? - Easy it's on Page 3 of issue 13 of M.U.O

Infinite lives for Mr.WIMPY? - easy it's page 12 of issue 56. What about connecting a printer? - easy, it's page 4 of issue 50.

Disc organisation of ORICDOS? - easy, it's page 6 of issue 31.

A listing for a KALEIDOSCOPE? - easy, it's page 18 of issue 56.

What about a Real-time clock? - easy, it's page 18 of issue 59.

Now how long would it take you to ascertain that little lot? Well, normally it would take hours. But thanks to Jon Haworth it has all become easy. Jon

has secretly been working on the complete INDEX published in O.U.M to everything

I have received my copy and am well impressed. A lot of effort has gone into making this publication, and now it can be yours for the cheapo price of 1.50.

For that you get the 20 page INDEX professionally copied and with a binder. Even the INDEX is indexed. It couldn't be simpler. It will be updated monthly. If you order now, it will include the topics from this issue. Instead of sending a cheque, you may send postage stamps. If your subscription is due, why not add the 1.50 to your renewal remittance! Orders should be sent to 0.U.M and the INDEX will be sent direct to you from Jon.

RAMBLING IN THE ROM - 41

No Rambles this month, instead...

I could not resist Dave's challenge to produce a list of French software. However, what follows is not, I stress, a complete list. It is a list of those French (and other foreign) programs I possess, hence the fact that I can give some details of them, and even a very subjective star rating. What it does show is the sheer diversity and quality of French software. It seems likely that the only source now for the future is on C.E.O. discs. Anyway, heads down and here we go.....

TITLE	PUBLISHER	CATEGORY	
****1815	. Cobrasoft .		Napoleonic war game
****3D Graph	D. Duffau		3D drawing/rotation
****3D Mover	. D. Dallaa .		
**3D Munch	. Loriciels .	. F . Ar . D	3D Pacman maze game
**Aide au Dessin Anime		. F . Ut . D	Hires drawing
*Aiglons			Rescue the spacemen
4-111		E Ar D	Invaders
*Alliens	. B. Raux	. F . Ar . D	Shoot the Indians
***Arsene Lapin			
****Ag des Ag	. Isosoft	. F . Ut . D	Assembler/disassembler
**As du Volant	. Hebdologiciel	. F . Ar . D	2D motor racing
***Assembler	. Micrologic .	. F . Ut . D	
**Atlantid	. Sprites	. F . Ar . D	Shoot 'em up
***A.T.M		. F . Ar . D	
***Attack on Kixi		. F . Ar . D	
**Auto Ecole	• • • • • •	. F . Ed . D	Hires journey
***Base+	. MOBZ	. G. Ut. D	Database (English)
**Bataille Navale	. D.Duffau	. F . St . D	Battleships
****BD Disk			Tape/disc transfer
**Bering		. F . Ar	Keep the whale alive
Bert		. F D	n
****Big Baston	. Sprites	. F . Si . D	Boxing game
**Blocus	. Logi-puce .	. F . St	BOX IN DIOCKS
**Bolide		. F . St . D	naze game
*Bombardier		. F . Ar	Chara dame
****Bombyx	. iniogrames .	. r . AI	Stock the shelves
**Boris		. F . Ut	Load at address
***Brk Prg		P 9+	Run another company
***Businessman	. ARG Info'que	F IIt	Weight calculator
***Canada	. Micrologic .	. F . Ar	Log-jumping
***Cani-balle		. F . Ar . D	
***Caractor	. Cobrasoft .	. F . Ut	Keyboard redefinition
***Carmaniac	. Micropuce .	. F . Ar	Car maze game
*Car War	. Theoric	. F . Ar	Car maze game
**Casinoric		. F . Si	Roulette
***Caspak		. F . Ar	Defend the castle
****Challenge Voile		. F . Si	Sailing race
*Challenger	. D.Misson		Space launch
**Cheops	. Marco Polo .	. F . Ad . D	Graphics/text
*Chess Madness	. K.O.N	. N . Ar	
****Chevaux		. F . Si . D	French ludo
**Citadelle	. Loriciels .	. F . Ad	Text only
****Clavidact	. Bleu Ciel .	. F . Ed . D	Touch typing tutor
***Clearer	. C.D.O	. F . Ut . D	Hires screen clear
***Cle de Fa		. F . Ed . D	Music tutor
***Cle de Sol	. Techni-M que	. F . Ed . D	Music tutor
**Cobra	. Norsoit	. F . Ar	Dinhall machine
*****Cobra Pinball		. F . Si	Chompin' chicken
****Cock'in			Match the colours
****Coloric		. r . at	Track verification
***Copform	F C T Compr	. F . Ut	Tane conier
*****Copieur Pro	. ral Gempp.	.г. UL	Conier
Contol	T N .	. F. Ut. DO	French phones
Coptel		. G . Ut	Letter header
**Course Olympique		. F . Si . D	100 metres race
**Corsaires	. M. Piron	. F . Ar . D	Naval frogger, etc.
***Crocky	. Loriciels	. F . Ar	Pacman game

****Crypt Show					
		. F .	Ad.	D	. 3D graphics/text
****Cubo Magique					. Match the dice
	nacioi				naton the dice
**Dactyl'Oric					. Screen page saver
****Deblock	S.Liberge .	. F .	Ut .		. Copier
***Dedal					
"""Dedal	iniogrames .		.AL .	• •	. Haze game
**Deplombatmos		. F .	Ut.		. Copier
****Dernier Metro	Micro Prog 5	. F .	Ad .		. Graphics/text
**** Detective Story	Innelec	F	D.G		. Graphics/text
***Dictee de Notes	Techni-M'que				
****Dit? D'Ac!	Bleu Ciel .	. F .	Ut .		. Q & A session
*Diver					. Shoot the whales
****Doggy					. Obstacle course
**Don Juan	N.M.L	. F .	St .	D .	. Very very French!
****Drive Point	Sprites				
	Sprices				
**Driver	Loriciels .	. r .	Ar.		. Car maze game
***Durendal	Cobrasoft .	. F .	Ad .		. Graphics/text
****Easytext					. Word processor
****Edit Plus					. On-screen Editor
*****Editeur Musical	Loriciels .	. F .	Ut .		. Music writing
**Enigmatus	Athena	. ¥ .	Ad .		. Graphics/text
****Esquive	Oric France .		Ar .	υ.	. Strategy type
Europe		. F .	Ed .	Ð.	. Geography
***Flash Page	Himem Inf'que	. F .	Ut.	D.	. Screen pages
	•				
****Flash Pages					
****FL Compte	I.N				
****Flight Simulator	C.E.O	, F	Si .		
					. Graphics/text
***Folibus					
*****Formule 1					
*Formule 1	Eric Valton .	F	Si .	р.	. Motor race
****Forth F83	C.E.O	. r .	υc .	טע	. Pananaae
*Fort Oric		. F .	Ar .	D.	. Breakout
****Frelon	Loriciels	. F	Ar .		. Helicopter game
AAA	C Manulus		٠	•	French change
***Fromages de France	c. magrin .	. г	Ea .	· ·	. French Cheeses
**Galactoric					. Space game (text)
***Gastronon	Loriciels .	. F .	Ar .		. Shoot 'em up
	Infogrammes .				
***Ghostman	Infogrames .	. F .	Ar .		. Pacman game
**Glouton	O. Courcot .	. F .	Ar .	ъ.	. Snake game
Grand Prix de l'Oric Hippic					
**Graphologie					. Handwriting test
***Hades	ERE Inf'que .	. F .	Ut .		. Assembler/monitor
	Mellowsoft .				
***Hector and the Phantom					
****Honey Kong					. Platform game
***Hu*bert	Loriciels .	. F .	Ar .		. Strategy type
**************************************	D Dwaand		n		. Bleakout Clone
****Hyperball		. F .			
Ice Hockey Manager	K.O.N	. F .	St.		•
Ice Hockey Manager	K.O.N	. F .	St.		•
Ice Hockey Manager *Intelligence Artificiel	K.O.N	. F . . N . . F .	St .		. Conversation
Ice Hockey Manager *Intelligence Artificiel ***Intertron	K.O.N	. F . . N . . F .	St .	 D .	. Conversation . Snake game
Ice Hockey Manager *Intelligence Artificiel ***Intertron	K.O.N	. F N F F .	St . St . Ad .	D .	. Conversation . Snake game . Multigame
Ice Hockey Manager *Intelligence Artificiel ***Intertron	K.O.N	. F N F F .	St . St . Ad .	D .	. Conversation . Snake game
Ice Hockey Manager *Intelligence Artificiel ***Intertron	K.O.N	. F N F F F .	St . St . Ad . Ar .	D .	. Conversation . Snake game . Multigame . Ghost Gobbler
Ice Hockey Manager *Intelligence Artificiel . ***Intertron ***Intox and Zoe ***Jackman Jasmitel	L. Benes Loriciels .	. F N F F F .	St . St . Ad . Ar .	D .	. Conversation . Snake game . Multigame . Ghost Gobbler
Ice Hockey Manager *Intelligence Artificiel . ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack	K.O.N	. F N F F F .	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid
Ice Hockey Manager *Intelligence Artificiel . ***Intertron ***Intox and Zoe ***Jackman Jasmitel	K.O.N	. F F F F F F .	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub	K.O.N	. F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub	K.O.N	. F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F F	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques **Jimmy Poub *Jumping Jack	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels .	. F . N F F F F F F F F F F F F F F F F	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques **Jimmy Poub *Jumping Jack **Jumpfox	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels	. F F F F F F F F F F F F F F F F F F	St . St . Ad . Ar . Si . Ar . A	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques **Jimmy Poub *Jumping Jack **Jumpfox	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel .	. F F F F F	St . St . Ad . Ar . Si . Ar . A	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques ***Jimmy Poub *Jumping Jack ***Jumping Jack ***Jumpfox Kaiser	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel .	. F F F F F	St . St . Ad . Ar . Si . Ar . A	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack *****Jeux Olympiques ***Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels . Hebdogiciel .	. F F F F	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits . Survive desert
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jasmitel ***Jex Attack ****Jeux Olympiques ***Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate	K.O.N. L. Benes Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline	. F	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack *****Jeux Olympiques ***Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate	K.O.N. L. Benes Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline	. F	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits . Survive desert
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jetx Olympiques ***jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *******L'Aigle d'Or	K.O.N. L. Benes Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline Loriciels	. F	St . St . Ad Ar . Si Ar Ar . St . Si Ad	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jimmy Poub *Jumping Jack **Jumping Jack **Jumping Jack **Sumpfox Kaiser *Kansas City ****Karate *****L'Aigle d'Or ****L'Antre de la Peur	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que .	. F	St. Ad Ar	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack *****Jeux Olympiques ***Jumping Jack *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate ******L'Aigle d'Or ***L'Antre de la Peur **La Flute Inca	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels Gasoline . Loriciels .	F . N	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack *****Jeux Olympiques ***Jumping Jack *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate ******L'Aigle d'Or ***L'Antre de la Peur **La Flute Inca	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels Gasoline . Loriciels .	F . N	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jasmitel ***Jex Attack ****Jeux Olympiques ***Jumping Jack **Jumping Jack	K.O.N. L. Benes Loriciels Loriciels Hebdogiciel Micropuce Loriciels Hebdogiciel Gasoline Loriciels ERE Inf'que Tansoft	. H	St. St. Ad. Ar	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jasmitel ***Jex Attack ****Jeux Olympiques ***Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ***Kansas City *****Karate *****L'Antre de la Peur **La Maison de la Mort **Le Chateau Ensorcele	K.O.N. L. Benes Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer	. N	St	D	Conversation Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jimmy Poub *Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort ***Le Chateau Ensorcele ***Le Diamant de Kheops	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer	F . N	St	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jimmy Poub *Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort ***Le Chateau Ensorcele ***Le Diamant de Kheops	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer	F . N	St	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Aigle d'Or ****L'Antre de la Peur ***La Flute Inca **La Maison de la Mort ***Le Chateau Ensorcele ***Le Diamant de Kheops ******L'**Le Diamant de l'Ile M.	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels .	F N	St	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques ***Jimmy Poub *Jumping Jack **Jumping	K.O.N. L. Benes . Loriciels . Loriciels . Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels Tansoft . P. Schweitzer Sprites . Loriciels .	F N	St	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Shoot 'em up
Ice Hockey Manager *Intelligence Artificiel ***Intertron **Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jetx Olympiques ***Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Aigle d'Or ***La Flute Inca **La Maison de la Mort **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops *****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le Fer D'Amnukor	K.O.N. L. Benes Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Toriciels . Tansoft P. Schweitzer Sprites Loriciels Sprites Norsoft	F N	St	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Text only . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II'
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Maison de la Mort **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops *****L'É Sera Chaud ****Le Fer D'Amnukor ***Le General	K.O.N. L. Benes Loriciels Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer Sprites Loriciels Sprites Norsoft Loriciels Loriciels	F N	St	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Maison de la Mort **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops *****L'É Sera Chaud ****Le Fer D'Amnukor ***Le General	K.O.N. L. Benes Loriciels Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer Sprites Loriciels Sprites Norsoft Loriciels Loriciels	F N	St	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ****L'E Sera Chaud ****L'E General ***Le General ***Le Manoir du Dr Genius	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Norsoft . Loriciels . Loriciels . Loriciels . Loriciels . Loriciels . Loriciels .		St. St. Ad Ar Ar Ar St. Ad	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques ***Jimmy Poub *Jumping Jack **Jumping Jack ******La Flute Inca ***La Flute Inca ***La Flute Inca ***Le Chateau Ensorcele ***Le Diamant de la Mort ***Le Diamant de l'Ile M. ***Le Sera Chaud ****Le General ***Le Manoir du Dr Genius ***Le Millionaire	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Norsoft . Loriciels . ERE Info'que		St. St. Ad. Ar Si Ar Ar St. Ad. Ad. Ad. Ad. Ad. Ad. Ad. Ad. Ad. Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Text only Graphics/text Graphics/text Graphics/text Shoot 'em up 'Tyrann II' Govern a country Graphics/text Business game
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques ***Jimmy Poub *Jumping Jack **Jumping Jack ******La Flute Inca ***La Flute Inca ***La Flute Inca ***Le Chateau Ensorcele ***Le Diamant de la Mort ***Le Diamant de l'Ile M. ***Le Sera Chaud ****Le General ***Le Manoir du Dr Genius ***Le Millionaire	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Norsoft . Loriciels . ERE Info'que		St. St. Ad. Ar Si Ar Ar St. Ad. Ad. Ad. Ad. Ad. Ad. Ad. Ad. Ad. Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Text only Graphics/text Graphics/text Graphics/text Shoot 'em up 'Tyrann II' Govern a country Graphics/text Business game
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jeux Olympiques ***Jimmy Poub *Jumping Jack **Jumping Jack **Jumping Jack **Jumping Jack **Jumping Jack **Lamping Jack **Lampin	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Norsoft . Loriciels . ERE Info'que . Loriciels . ERE Info'que . Loriciels . ERE Info'que .		St St Ad Ar Si Ar Ar St St Ad Ad Ad Ad Ad Ad Ad Ad Ad Ad Ad Ad Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Text only Graphics/text Shoot 'em up 'Tyrann II' Govern a country Graphics/text Business game Children's maths
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Aigle d'Or ***La Flute Inca **La Maison de la Mort **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops *****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le Fer D'Amnukor ***Le General ***Le Manoir du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Mystere de Kikekankoi	K.O.N. L. Benes Loriciels Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Tansoft P. Schweitzer Sprites Loriciels Sprites Loriciels		St. Std Ar Ar Ar Ar Ar Ar Ar Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Shoot 'em up 'Tyrann II' Govern a country Graphics/text Business game Children's maths Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ***Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ***Le Diamant de l'Ile M *L'Éte Sera Chaud ****Le General ***Le General ***Le Manoir du Dr Genius ***Le Minotaure ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Retour du Dr. Genius ***Le Retour du Dr. Genius	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Loriciels . ERE Info'que . Loriciels .		St. Std Ar Ar Ar Si Ad	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics/text . Graphics/text . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate ******L'Aigle d'Or ****L'Antre de la Peur **La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ***Le Diamant de I'Ile M *L'Éte Sera Chaud ****Le General ***Le General ***Le Manoir du Dr Genius ***Le Millionaire ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius	K.O.N. L. Benes Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels ERE Inf'que Loriciels ENE Inf'que Loriciels Loriciels Exprites Loriciels Sprites Loriciels Loriciels ERE Info'que Loriciels ERE Info'que Loriciels ERE Info'que Hatier Loriciels Loriciels Loriciels FRE Loriciels ERE Loriciels ERE Loriciels ERE Loriciels FRE Loriciels Loriciels FRE Loriciels FRE Loriciels		St. Std Ar Ar Ar Sti Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Graphics/text Business game Children's maths Graphics/text Business game Children's maths Graphics/text Graphics/text Business game Children's maths Graphics/text Graphics/text Business game Children's maths
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ***Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ***Le Diamant de l'Ile M *L'Éte Sera Chaud ****Le General ***Le General ***Le Manoir du Dr Genius ***Le Minotaure ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Retour du Dr. Genius ***Le Retour du Dr. Genius	K.O.N. L. Benes Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels Loriciels ERE Inf'que Loriciels ENE Inf'que Loriciels Loriciels Exprites Loriciels Sprites Loriciels Loriciels ERE Info'que Loriciels ERE Info'que Loriciels ERE Info'que Hatier Loriciels Loriciels Loriciels FRE Loriciels ERE Loriciels ERE Loriciels ERE Loriciels FRE Loriciels Loriciels FRE Loriciels FRE Loriciels		St. Std Ar Ar Ar Sti Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Graphics/text Business game Children's maths Graphics/text Business game Children's maths Graphics/text Graphics/text Business game Children's maths Graphics/text Graphics/text Business game Children's maths
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jetx Olympiques ***Jimmy Poub *Jumping Jack **Jumping Jack ***********************************	K.O.N. L. Benes . Loriciels . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels Sprites . Norsoft . Loriciels . ERE Info'que . Loriciels . ERE Info'que . Loriciels . ERE Info'que . Loriciels . Loriciels . ERE Info'que . Loriciels .		St. St. Ad Ar Si Ar Ar Sti Add Add Add Add Add Add Add Add Add Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Shoot 'em up 'Tyrann II' Govern a country Graphics/text Business game Children's maths Graphics/text Graphics/text Graphics/text Business game Children's maths Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jumpfox *Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur ***La Flute Inca **La Maison de la Mort ***Le Chateau Ensorcele ***Le Diamant de Kheops ****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le General ****Le Manoir du Dr Genius ***Le Millionaire ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Secret de Kaipour ***Le Secret de Kaipour ****Le Secret de Kaipour ****Le Secret de Kaipour ****Le Tresor de Tarakunda	K.O.N. L. Benes Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Toriciels . Hebdogiciel . Hebdogiciels . Hebdogiciel .		St. Std Ar Ar Ar Ar Ar Ar Ar Ad	D	Conversation Snake game Multigame Ghost Gobbler Bombing raid Four sports Platform game Jump the levels Collect rabbits Survive desert Oriental combat Graphics only Graphics/text Text only Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Shoot 'em up 'Tyrann II' Govern a country Graphics/text Business game Children's maths Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics/text Graphics only Graphics
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L' Antre de la Peur ***La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ****L' E Era Chaud ****Le Fer D' Amnukor ***Le General ***Le Manoir du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Retour du Dr. Genius ***Le Secret de Kaipour ***Le Secret de Kaipour ****Le Tresor de Tarakunda ****Le Tresor du Pirate	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Loriciels . ERE Info'que . Loriciels . Loriciels . Loriciels . Loriciels . ERE Info'que . Loriciels . Loriciels . Loriciels . ERE Info'que . Hatier . Loriciels .		St. Std Ar Ar Ar Sti Ad	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Graphics/text . Text only . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics only . Graphics . Graphics . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ***Le Diamant de l'Ile M *L'Éte Sera Chaud ***Le General ***Le General ***Le Manior du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Tresor de Tarakunda ****Le Tresor de Neptune ***Le Trident de Neptune	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Loriciels . ERE Info'que . Loriciels . ERE Info'que Hatier . Loriciels . Loriciels . ERE Loriciels . ERE Info'que . Loriciels . ERE Info'que . Loriciels .		St. Std Ar Ar Ar Sti Add Add Add Add Add Add Add Add Add Ad	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics only . Graphics . Graphics fext . Underwater game
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur **La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ***Le Diamant de l'Ile M *L'Éte Sera Chaud ***Le General ***Le General ***Le Manior du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Tresor de Tarakunda ****Le Tresor de Neptune ***Le Trident de Neptune	K.O.N. L. Benes . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Loriciels . ERE Info'que . Loriciels . ERE Info'que Hatier . Loriciels . Loriciels . ERE Loriciels . ERE Info'que . Loriciels . ERE Info'que . Loriciels .		St. Std Ar Ar Ar Sti Add Add Add Add Add Add Add Add Add Ad	D	. Conversation . Snake game . Multigame . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Graphics only . Graphics . Graphics fext . Underwater game
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate ******L'Aigle d'Or ****L'Antre de la Peur ***La Flute Inca **La Maison de la Mort **Le Chateau Ensorcele ***Le Diamant de Kheops ****Le Fer D'Amnukor **Le General ***Le General ***Le Manoir du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Retour du Dr. Genius ***Le Retour du Dr. Genius ***Le Secret de Kikekankoi ***Le Secret de Kaipour ***Le Secret de Tarakunda ***Le Tresor de Tarakunda ****Le Trident de Neptune ***Le Yiking	K.O.N. L. Benes . Loriciels . Loriciels . Loriciels Hebdogiciel . Micropuce . Loriciels Hebdogiciel Gasoline . Loriciels . ERE Inf'que Tansoft . P. Schweitzer Sprites . Loriciels . Sprites . Norsoft . Loriciels . ERE Info'que . Hatier . Loriciels . Loriciels . ERE Info'que . Hatier . Loriciels . Loriciels . Loriciels . ERE Loriciels . Micro Prog 5 N.M.L		St. Std Ar Ar Sti Add Add Add Add Add Add Add Add Add Ad	D	. Conversation . Snake game . Multigame . Ghost Gobbler Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics only . Graphics . Graphics text . Underwater game . Consult the oracle
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur ***La Flute Inca **La Flute Inca **La Maison de la Mort ***Le Diamant de Kheops ****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le Fer D'Amnukor ***Le General ****Le Manoir du Dr Genius ***Le Millionaire ***Le Millionaire ***Le Mystere de Kikekankoi ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Tresor de Tarakunda ****Le Tresor de Pirate ***Le Yiking ***Lilla and Jacky	K.O.N. L. Benes Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer Sprites Loriciels Sprites Loriciels Loriciels Loriciels Loriciels ERE Info'que Hatier Loriciels Loriciel		St. Std Ar Ar Ar Sti Ad	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Underwater game . Consult the oracle . Graphics/text
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jetx Olympiques ***Jimmy Poub *Jumping Jack **Jumping Jack **Jumpfox Kaiser ***Karsas City ****Karate *****L'Aigle d'Or ****La Flute Inca **La Maison de la Mort **La Maison de la Mort ***Le Diamant de Kheops ****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le Fer D'Amnukor ***Le Manoir du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Tresor de Tarakunda ****Le Tresor de Pirate ***Le Trident de Neptune *Le Yiking ***Lilla and Jacky ***LM Plus Compiler	K.O.N. L. Benes Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer Sprites Loriciels Sprites Loriciels Loriciels ERE Info'que Hatier Loriciels Loriciel		St. Std Ar Ari Ar Stidd Add Add Add Add Add Add Add Add Add	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Underwater game . Consult the oracle . Graphics/text . Basic compiler
Ice Hockey Manager *Intelligence Artificiel ***Intertron ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jet Attack ****Jimmy Poub *Jumping Jack **Jumpfox Kaiser *Kansas City ****Karate *****L'Antre de la Peur ***La Flute Inca **La Flute Inca **La Maison de la Mort ***Le Diamant de Kheops ****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le Fer D'Amnukor ***Le General ****Le Manoir du Dr Genius ***Le Millionaire ***Le Millionaire ***Le Mystere de Kikekankoi ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Tresor de Tarakunda ****Le Tresor de Pirate ***Le Yiking ***Lilla and Jacky	K.O.N. L. Benes Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer Sprites Loriciels Sprites Loriciels Loriciels ERE Info'que Hatier Loriciels Loriciel		St. Std Ar Ari Ar Stidd Add Add Add Add Add Add Add Add Add	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Underwater game . Consult the oracle . Graphics/text . Basic compiler
Ice Hockey Manager *Intelligence Artificiel ***Intox and Zoe ***Jackman Jasmitel ***Jet Attack ****Jetx Olympiques ***Jimmy Poub *Jumping Jack **Jumping Jack **Jumpfox Kaiser ***Karsas City ****Karate *****L'Aigle d'Or ****La Flute Inca **La Maison de la Mort **La Maison de la Mort ***Le Diamant de Kheops ****Le Diamant de l'Ile M. *L'Éte Sera Chaud ****Le Fer D'Amnukor ***Le Manoir du Dr Genius ***Le Millionaire ***Le Minotaure ***Le Mystere de Kikekankoi ***Le Retour du Dr. Genius ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Secret de Kaipour ***Le Tresor de Tarakunda ****Le Tresor de Pirate ***Le Trident de Neptune *Le Yiking ***Lilla and Jacky ***LM Plus Compiler	K.O.N. L. Benes Loriciels Loriciels Loriciels . Hebdogiciel Micropuce Loriciels . Hebdogiciel . Gasoline Loriciels ERE Inf'que . Tansoft P. Schweitzer Sprites Loriciels Sprites Loriciels Loriciels ERE Info'que Hatier Loriciels Loriciel		St. Std Ar Ari Ar Stidd Add Add Add Add Add Add Add Add Add	D	. Conversation . Snake game . Multigame . Ghost Gobbler . Bombing raid . Four sports . Platform game . Jump the levels . Collect rabbits Survive desert . Oriental combat . Graphics only . Graphics/text . Graphics/text . Text only . Graphics/text . Graphics/text . Graphics/text . Shoot 'em up . 'Tyrann II' . Govern a country . Graphics/text . Business game . Children's maths . Graphics/text . Graphics/text . Graphics/text . Graphics/text . Underwater game . Consult the oracle . Graphics/text . Basic compiler

```
Loriciels . . F . Ut . . . Language
Infogrames . . F . Ut . . . Logo language
Loriciels . . F . Ut . D . . Hires drawing
C.E.O. . . . F . St . D . . Run America
    **Logo V1.0
  ***Logor . . . . .
*****Lorigraph
   ***M. le President
 ****Macadam Bumper .
                                     ERE Info'que
                                                   . F . Si . D . .
                                                                      Pinball machine
  ***Mario Bros . . *Martiens . . .
                                     Hebdogiciel . . F . Ar . . . .
                                                                      Conveyor belts
                                     V. Jajolet . . F . Ar . D . . Invaders
                                                   . F . Ad . D . . 3D graphics/text
. F . Ut . . . . Hires drawing
. F . St . D . . 'Memory' game
                                     N.M.L. . . ERE Info'que
 *****Masque D'Or .
 ****Master Paint
                                     **Memostrip
 ****Meurtre à Grande Vitesse
  ****Microgeo . . . . . .
                                                                      Card game
                                                    . F . Si . D . .
   ***Milles Bornes
                                     ERE Info'que
                                                                      Jet simulator
 ****Mission Delta
                                                    . F . Si . . . .
                                                    **Mission Impossible
                                     Free Game B.
                                                                      Graphics/text
   Helicopter flight
                                     C. E. O.
                                            . .
  ****Mluch .
                                                                      Strategy type
                                     C.D.O.
   ***Monasm V1.1 .
                                                    . F . Ut . . . .
                                                                      Monitor/assembler
   ***Moniteur 1.1 . . .
                                     Loriciels .
                                                    . F . Ut . . . .
                                                                      Monitor/assembler
     *Monopolic . . .
                                                    . F . Si . . . .
                                                                      Board game
                                     C. Hugel .
                                                                      Graphics/text
   ***Montsegur
                                                    . F . Ad . . . .
    **Moon Base Alpha
                                     G. Saviard .
                                                    . F . Ar . . . .
                                                                      Lunar lander
      Mordor . . . .
                                                    . F . Ad . D . .
                                     . . . . .
                                     ***Mozart
                                                    . F .
                                                                      Trio in G Major
                                                                      French phones
      MS Tel
                                     C.O.R.E. . .
                                                    . F . Ut . . . .
                                                                      Spreadsheet
      Multicalc
                                     M.G.V. . .
                                                    . F . Ut . D . .
                                                                      Tape copier
******Multicload System .
                                                    . F . Ut . . .
   ***Multicopy V1.1 . .
                                                                      Copy/verify
   ***Nessy . . . . .
                                     Free Game B.
                                                     . F . Ar . . . .
                                                                      Snake game
                                     . . . . . . . F . Ut . DO . S. Grimal . . F . Ar . D . .
                                                                      Disc sector editor
  ****Nibble
   ***Nibbler . . . .
                                                                      Snake muncher
   ** Objectif Elysee .
                                     ERE Info'que
                                                    . F . St . . .
                                                                      Be President
   ***Odyssee 2000 . . . ***Oeil de Zoltec . . .
                                     C. Baribaud .
                                                    . F . Ar . D . .
                                                                      Invaders
                                     C.D.O. . .
                                                    . F . Ad . D . .
                                                                      3D graphics/text
     *Oh Bert . . .
                                     S. Mecary
                                                    . F . Ar . D . .
                                                                      Q*Bert clone
    **Olive & Popeye .
                                                    . F . Ar . D . . Snake muncher . F . Si . D . . 100 metres, etc.
    **Olympics . . . *Oric Backup . .
                                     E. Villeger .
                                                    J.Repetto .
Tansoft . .
                                                                      Copier
                                                                      Fruit machine
     *Oric Bandit .
                                     . F . Ut . . . .
                                                                      Multifiler
  ****Oricfile (F.A.P.) .
  ****Oric Phone . .
                                                                      Autodial phone number
                                                                      Hires drawing
 ****Origraph . .
                                                 . . F . Ar . . . .
   ***Orion . .
                                     Loriciels
                                                                      Invaders
                                     CF2E . . . Isosoft . .
                                                     . F . Ut . . . .
                                                                      Music tutorial
   ***Oriscope 3 . .
   ***Oriscribe
                                                    . F . Ut . . . Word processor
                                     Hatier . . F . Ed . . . . Hatier . . . F . Ed . . . .
                                                                      French nouns (11+)
  ****Orthocrack 1
  ****Orthocrack 2
                                                                      French nouns (11+)
                                             . . . F . Ed . . . .
  ****Orthocrack 3
                                     Hatier
                                                                      French verbs (11+)
  ****Othello . . . .
                                     C.E.O.
                                                    . F . Si . D . .
                                                                      Board game
                                                   . F . Si . . . . Shoot spaceships . F . Ar . DO . Sedoric only
    **Ovni .
                                     Loriciels
    **Pacman + .
                                     T. Ruel .
                                                . . F . Ar . D . .
                                                                      Collect pots
                                     S. Sugiura
   ***Painter 2
                                                  . . F . Ar . D . .
                                                                      Buggy shoot out
     *Patrouille Lunaire
                                     KDB Software
                                                    . G . Ut . . . .
                                                                      Hires drawing
  ****Patsch (O.G.D.S.) .
                                              . . F . Ar . . . Kill the b . . . F . Ad . D . . . . . Text only
                                     Loriciels .
Bellamy . .
    **Pengoric . . . .
                                                                  . . Kill the baddies
    **Pharaon
    **Pierre Étoile
                                     C.C.O.I. . . Loriciels .
   ***Pilote . . .
                                                     . F . Si . . . .
                                                                      2D car maze
  ****Poker .
                                                    . F . Si . D . .
                                                                      Card game
                                                    . F . Ut . D . .
                                                                      Multifiler
 *****Polyfichier . .
                                     Innelec . .
     *Poopy . . . .
                                     Micrologic . . F . Ar . D . . (5+)
                                     Micropuce . . F . Ut . . . .
                                                                      Copier
    **Private Copy .
                                                                      Shoot 'em up
                                     Loriciels
                                                 . . F . Ar . .
    **Protector . . .
                                     Sprites .
A.Widhani
                                                  . . F . Ar . D . . Platform game
  ****Psychiatric . .
   ***Racer . . .
                                                   . G . Si . D . . Motorbike racing
    **Raspo the Bouncy .
  ****Rambo Music .
                                     Micro Maniac
                                                     . F . . . D . . Main theme
                                                   . F . Ar . D . . Maze game
                                     . F . Ad . . . . Graphics/text
. F . Si . D . . Board game
   ***Rendezvous de la Terreur.
                                     Loriciels .
D. Duffau .
 *****Reversi Champion . .
  ****Revues
                                                    . F . Ut . D . . French magazine index
   ***Rico's Gulf .
                                     BG Soft . . . F . Ar . D . .
                                     C.D.O. . . F . Ar . D . . Platform game
   ***Risiko
                                                    . F . Ad . D . .
                                                                      Text/graphics
   ***Robinson Crusoe
                                     C.E.O.
 *****Roland Garros .
                                     Sprites
                                                    . F . Si . D . . Tennis
 C. Pierret . . F . St . D . . Maze game
                                                    . F . St . . . . Space mission
. F . Ut . DO . Latest version
. F . Ut . DO . Disc sector editor
                                     Ere Info'que
                                     *****Sedoric V1.007 .
  . Karate
                                                             . D .
   ***Simulateur Vol .
                                                     . F . Si . D . . Flight simulator
  ****Singerie . . .
                                     Theoric . . . F . Ar . D .
                                                                     . Platform game
                                                  . . F . Ar . . . Snake game
. . F . Ut . . . Oric-Cad French
. . F . Ar . D . . Invaders
  ****Snaky . . .
                                     Sprites . .
   ***Solides .
                                     Tansoft
   ***Sorvivor . .
                                     Loriciels
```

```
***Yahtzee . . .
***Yam
            . F . Ar . D .
 Zamcopter
```

Stars reflect program quality on a scale of 1 to 6 No stars means untested rather than no good!

```
'F'= French software 'G'= German software
'N'=Norwegian software
```

'(5+)' etc = for children aged 5+ etc.

All Atmos compatible unless '0'

'D' = Also on disc' DO ' = Disc only

Categories:

Ar = Arcade Ad = Adventure Si = Simulation

Ut = Utility Ed = Education

Hope the eyes are still O.K!

More Rambling next month...

Jon Haworth

There must have been times when all home computer users have had to struggle with the volume control of a cassette recorder when trying to load a cassette program. The feeling of frustration is worse for those of us who have been able to afford a disc drive:— there's all that beautifully efficient machinery standing there idle while we wait yet another 5 minutes with fingers crossed. The nerves become even more strained when the program won't load at all, we haven't made a backup copy, and the software company has gone out of business! So wouldn't it be a relief if we could transfer our favourite games and utilities on to disc?

The good news is, it is possible, using the methods described in this article; the bad news is, not always! These methods are not carved in stone, by the way, and might be improved upon, so the author welcomes all comments from other Oric users. All techniques here assume Oric DOS V1.1 resident on an Atmos; appropriate commands for other DOS's could be substituted.

Transferring BASIC programs

Some good commercial programs are purely in BASIC and not even LIST-protected, so that when the option of "Another Game? (Y/N)" comes up after play, an "N" response will stop the program and leave it in memory. The command <code>!SAVE"filename"</code>, AUTO then saves the program to disc.

When the Y/N option is not given, and CTRL-C either does not work or causes the computer to reset itself, it is necessary to re-load the program from the start without AUTO-running it. There are two steps to achieve this:-

- 1. Don't load the first short program on the tape, as it is probably the "Cassette Loading Bogus Error Rectification Program" as found on page 222 of the Atmos manual. This machine code program, usually seen loading as a very brief " * " on the status line, avoids the loading errors generated by some cassette recorders, and allows AUTO-run programs to run with errors present.
- 2. If no errors are generated by the recorder, and the main program still runs without " * " present, introduce a few of your own. Listen for the faint sounds of loading from the computer itself, and when the buzz (Fast mode) or warble (Slow mode) of loading begins, and before the "Loading . " message appears on the status line, briefly pause the recorder, then continue playback. When the program has loaded, the message "Errors found" should appear, and the computer will go into Ready mode. The program can then be !SAVE 'd in the normal way.

The Cassette File format

Whereas BASIC programs can be simply !SAVE 'd, machine code (m/c) programs, and programs containing both BASIC and m/c, require start— and end-addresses for the !SAVE command, the same as required for the CSAVE command. These addresses must be present at the start of all cassette files, in order that the computer can put the incoming data into the correct part of memory.

One way of finding out these addresses is to make the computer think it is dealing with an ARRAY rather than a program, so Oric-1 owners will need the upgrade to the Atmos BASIC before going any further. The first thing to do is to store a blank array on a spare cassette, which should be reserved for use on further occasions. The array can be created by starting the recorder and RUNning the following program:-

¹⁰ DIM A**\$**(50)

¹⁵ FOR T=0 TO 50: A\$(T)="A": NEXT

¹⁷ CLS: PRINT "Start recording, then press any key."

¹⁸ GET B\$

20 STORE A\$,"ARRAY"
30 END

We now use another program to load this array back into memory, but we can interrupt the process to exchange our array file with the commercial program. The 'Cassette File Analysis Program' that I've developed instructs the computer to load a String array, and analyses the contents of the array as a sequence of ASCII values, which are displayed on the screen, or using LPRINT, to a printer:-

```
10 DIM A$(200)
20 RECALL A$,""
30 FOR T=0 TO 200
40 Q$=A$(T): L=LEN(Q$)
50 IF L=0 THEN 100
60 FOR D=1 TO L
70 F$=MID$(Q$,D,1): AF=ASC(F$)
80 IF AF>47 AND AF<58 THEN PRINT AF;: G
0TO 90
85 IF AF>32 AND AF<127 THEN PRINT F$; E
LSE PRINT AF;
90 NEXT D
100 NEXT T
```

When the program is run, the "Searching .." message is displayed on the status line, and the array tape we recorded earlier is played back. When the status line message changes to "Loading .. ARRAY S", playback is immediately stopped and the tape replaced by the commercial program. On playing this back, the computer accepts the program as part of the same array, and continues to load until full, when the message "Errors found" is printed, followed by the contents of the array.

Let's look at our old friend the "Cassette Bogus Error Program" as a typical example:-

```
22
      22
           22
                 22
                            22
                                 22
                                            22
                                                 22
      22
           22
                                                 22
 22
                 22
                      22
                            22
                                 22
                                      22
                                            22
 22
           22
                                           22
      22
                 22
                      22
                            22
                                 22
                                      22
                                                 22
                          $ 255
                                   255
                 22
                      22
                                          128
                                                 199
      191
             2
                 129
                       232 *
                                   8 \times 173
                               0
 255
                                        228
       201
              1
                  208 (
                         173
                                 182
162
             21
      208
                  160
                         9
                             185
                                    181
                            Ō
     136
            16
                 247
                        169
                               141 E
 141 F 2 La 232
                             2
                      129
                                 191
       255
              255
                     0 L 182
                                 231
                                     H 169
           2 hL"
     122
                   238
                          255
                                 206
                                       56
                                           22
 1 1
      22
           22
                 22
                      22
                            22
                                 22
                                      22
                                                 22
 22
      22
           22
                            22
                                 22
                 22
                      22
                                      22
                                            22
                                                 22
           22
                                                 22
 22
      22
                 22
                      22
                            22
                                 22
                                      22
```

The leader is printed first as several lines of CHR\$(22) 's, (only a short section is shown here), then the first character of the file which is a "\$". Four bytes then follow which may be File Type Identifiers (m/c, BASIC, ARRAY, etc.) and which are outside the scope of this article. The next two bytes are the high-byte (H) and low-byte (L) respectively of the end address, which can be calculated in decimal as 256 * H + L . The next two bytes are H and L for the start address, followed by one byte and then the file title, i.e. the name under which it was CSAVE 'd. In our "Bogus Error" example above, note the "\$" sign, end address (2 191 = 703 decimal), and start address (2 129 = 641). The bytes may have been represented by single letters if their ASCII values lie within the Oric's keyboard characters.

more to come....

THE GAMESTER

MAHJONG

Henry Marke from Portsmouth has spent many weeks attempting to clear the screens on MAHJONG from the C.E.O and finally he has cracked it. On Monday Sept. 7th. at 6.15 p.m., I had a phone call from Henry saying that in a game lasting over 2 hours; he had cleared screens 1 to 5 and had totalled 12,240 pts. He was then presented with a further screen 5 attempt. His final total score was 12,370 pts.
Congratulations to Henry, who will now probably concentrate all efforts on beating Denis Bonfield's score on TETRIX. While I was in the Portsmouth area a few weeks ago, I paid a visit Henry, whose wife Rene and granddaughter Joanne are also ardent MAHJONG and TETRIX players.

TERNINUS

TERMINUS is a French graphical adventure, which was on the Winter 1991 JEO DISC. Others amongst you may have obtained it from other sources. Here is a tip to get you going from Chris Hearn of Tring.

- At the station, 'PREND EPINGLE' (take pin). Then 'M' or 'MONTER' to climb the stairs. You then go forward with 'AVANCE'. When you get to the locked door, insert pin with 'INSERER EPINGLE' and enter with 'AVANCE'. You will find a dead-end if you then try to go East,so try another direction.e.g 'O' for west. Well that solves the problem of getting through that door. If you complete it, please write to O.U.M.

HOUSE OF DEATH

James Groom of Halesowen is seeking help on Tansoft's 'House of Death'. He would like to know how to get through the mirror.

CHANNEL 8

We are informed by 'ADVENTURESOFT' that the 3 titles of Brian mentioned in last month's O.U.M, namely - MIDWINTER, AFTER THE FIRE and BEYOND THE INFINITE were never in fact completed.

OTHER MACHINES

John Peach has been using his DRAGON a lot recently. John's other working computers are: - ORIC 1, ATMOS, ZX81, SPECTRUM, and SPECTRUM +2.

Meanwhile new reader Jim Collier of Eccles also runs an AMSTRAD 464 and

James Groom has recently been trying to solve 'PERSEUS & ANDROMEDA', 'GOLDEN BATON' and 'ARROW OF DEATH Pt.2' on, dare I say it, the Spectrum. James is hoping to start a colection of 8 bit machines/software and is currently seeking a DRAGON.

SOCCER HAMAGER

I recently came across a new piece of commercial software to me, namely 'SOCCER MANAGER'. KINIGHTSOFT of Nelson in Lancashire released this 1984 Atmos and there is a credit to U.K.GOLD, who probably ac ted

distributors. Side A contains the game in English, whilst the B side contains it in French. The idea of the game is as follows:

La pression l'anxiete l'humiltion — gardez sous la main les cachets d'aspirine! Voila ce qui pourraient vous attendre enjouant "L'Entraineur de Football". Mais, de l'autre cote, en utilisant votre experience et votre determination il pourrait montrer le chemin vers le succes et la gloire!

THE GAMESTER MORE FOR

SOCCER MANAGER (Contd.)

Apres avoir acheve la renomme et le succes aupres de vous etes en route pour ganer la Coupe Europeenne. la Coupe Francais Mais d'abord les problemes vous pourrez rencontrer. Des bagares au stade, mauvais temps, la relegation, les prejudices, les assurances, les soin medicaux, les rocettes a la barriere, la demission, la faillite et la chance.

Des graphiques de haute resolution animes en 3D - son superbe. Et maintenant il faut jouer.

Well, did you get all that! At least are French readers will understarit. Before you reach for your French dictionaries; here is what it means: understand Stress, anxiety, tension, humilition (note from the Editor the the job here at 0.U.M), keep your aspirin by your side! This is what may be in store for you after playing "Soccer Manager". There again, using your skill and determination it could be your road to success and glory. Having achieved league fame and F.A cup success you are on the way to the European Cup.

But first your problems..... Ground riots, bad weather, relegation, injuries, insurance, medical expenses, gate takings, sacking, bankruptcy and chance! 3D animated high resolution graphics - superb sound.

Now play the game.

If in 1983 or whenever, one had gone into a computer shop and had seen this game running on aan Oric; then, such is the quality of this game, that this game running on aan Oric; then, such is the quality of this game, that you would of bought a Spectrum! The sleeve notes must surely contravene the Trade Descriptions Act. They even claim ORICLE TV transmissions, which consist of one line of double height printing. The highlights of animated action last for about 30 seconds. I don't think a goal is ever shown to be scored. It is hard to tell, due to the flickering of the players, especially when they dissapear as they move. You can'y pick your team. You are supposed to be able to buy players, but that function doesn't appear to work. The 'superb sound' is pathetic. All in all, I would say that this must have caused quite a laugh in France, when you think of all the trouble that the publishers had gone to in translating it into their native tongue.

Anyone want to buy it? Anything this bad probably means that it is very rare and therefore I will accept 10 pounds for it!

SOFTINDEX

A very big thank you to David Goodrum for yet another update to super 'SDFTINDEX' program. It will now accept 1700 records instead of original 900. Now I can index some more titles. his

David also tells me that he is still beavering away on ENCHANTED, which is his huge text adventure on Sedoric Dos. A preview of this game is to be found on the first 'OUMDISC'.

CASSETTE SOFTHARE

Gradually we are running out of certain Oric cassette software. I do expect to be able to replenish stocks of certain titles. Therfore if not have been putting off buying particular titles, it would be wise to snap them up now.

Currently one of the best selling word processors for the Atmos WORDWORTH. I only have 4 copies left. SPECIAL PRICE to 0.U.M readers clear them is 3 pounds including postage and for this you get a 24 p to manual.

Over the next two pages we will print the beginning of an arcade game listing.
The next issue of O.U.M will continue the listing. Special thanks to Norma Wrangham for the translation. (See full story elsewhere in O.U.M - numero uno for Tappers!!).

21 PRINT"If you possess the ORIC-1, ":PRINT" press key 1 ":PRINT:PRINT 1330 Y1=Y+1:IFY1=2760T01230 22 PRINT"If you possess the ATMOS, ":PRINT" press key 1340 S=SCRN(X,Y1):S1=SCRN(X+1,Y1):IFS<>3260T01370 23 SETX\$:ID=VAL(X\$):CLS 1350 IFS1<>3260T01400 100 REM ### THE BOTTLE ### 1360 PLOTX, Y1, P\$:PLOTX, Y, " ":Y=Y1:60T01320 200 EDSUB6500 1370 IFS=123THENPLOTX,Y1,32:G0SUB2030:G0T01350 210 GOSUB5500 1380 IFS1=123THENPLOTX+1,Y1,32:60SUB2030 220 GOSUB6000 1390 GOTO2530 230 GOSUB5760 1400 IFS1=123THENPLOTX+1,Y1,32:60SUB2030:60T01360ELSE2530 240 GOSUB5000 1420 IFPEEK(A) <>15960T01420 250 GOSUB1000 1430 IFPEEK(A)<>18960TD1490 260 60108000 1440 IFNOT (PEEK (A)=1910RPEEK (A)=189)60T01490 990 END 1450 X2=X+2:IFX2=3960T01510 1000: 1460 S=SCRN(X2,Y):IFS<>3260T01480 1020 : 1470 PLOTX+1,Y,P\$:PLOTX,Y,32:X=X+1:60T01440 1030 VT=0:VB=0:VV=0:VI=3:XV=48011 1480 IFS=123THENFLOTX2,Y,32:60SUB2030:60T01470ELSE2530 1040 X=INT(RND(1)#37)+1:Y=INT(RND(1)#27) 1490 IFPEEK(A)<>19060T01550 1050 IFSCRN(X,Y)<>320RSCRN(X+1,Y)<>3260T01040 1500 IFNOT (PEEK (A)=1910RPEEK (A)=190)60T01550 1060 PLOTX,Y,P\$ 1510 X1=X-1:IFX1=060T01450 1065 IFOP=260T01420 1520 S=SCRN(X1,Y):IFS<>3260T01540 1070 GETW\$: IFW\$ <> " "GDT01070 1530 PLOTX1,Y,F\$:PLOTX+1,Y,32:X=X1:60T01500 1075 RETHS 1540 IFS=123THENPLOTX1,Y,32:60SUB2030:60T01530ELSE2530 1060 W=ASE(W\$):IFW<80RW>11GGT01070 1550 IFFEEK(A)()17560T01640 1090 IFW<>960T01150 1560 IFNOT (PEEK (A)=1910RPEEK (A)=175)60T01640 1100 W\$=KEY\$:IFW\$<>"%BDT01080 1570 Y1=Y-1:IFY1=-160T01660 1110 X2=X+2:IFX2=3960T01170 1580 S=SCRN(X,Y1):S1=SCRN(X+1,Y1):IFS<>3260T01610 1120 S=SCRN(X2,Y):IFS<>3260T01140 1590 IFS1 \3260T01630 1130 PLOTX+1,Y,P\$:PLOTX,Y,32:X=X+1:GOT01100 1600 PLOTX,Y1,F1:FLOTX,Y," ":Y=Y1:GOT01560 1140 IFS=123THENPLOTX2,Y,32:60SUB2030:60T01130ELSE2530 1610 IFS=123THENFLOTX,Y1,32:60SUB2030:60T01590 1150 IFW()860T01210 1620 IFS1=183THENPLOTX+1,Y1,38:60SUB2030:60T02530ELSE2530 1160 W\$=KEY\$:IFW\$<>""GOTD1080 1630 IFS1=123THEMFLSTX+1,Y1,32:60SUB2030:60T01600ELSE2530 1170 X1=X-1:IFIO=1THENIFX1=060T01110ELSEIFX1=160T01110 1640 IFPEEK (A) (18080T01430 1180 S=SCRN(X1,Y):IFS<>3250TD1200 1650 IFNOT (PEEK (A)=1910RPEEK (A)=180)60T01400 1190 PLOTX1,Y,P\$:PLOTX+1,Y,32:X=X1:GOT01160 1660 Y1=Y+1:IFY1=2750T01570 1200 IFS=123THENPLOTX1,Y,32:60SUB2030:50T01190ELSE2530 1670 S=SERN(X,Y1):S1=SERN(X+1,Y1):IFS<>3260TD1700 1210 IFW<>1160T01310 1680 IFS1 (>3260T01720 1220 W\$=KEY\$:IFW\$<>""60T01080 1690 PLOTX,Y1,F\$:PLOTX,Y," ":Y=Y1:50T01650 1230 Y1=Y-1:IFY1=-160T01330 1700 IFS=123THENPLOTX,Y1,32:60SUB2030:60T01680 1240 S=SCRN(X,Y1):S1=SCRN(X+1,Y1):IFS<>3260T01270 1710 IFS1=123THENFLOTX+1,Y1,32:50SUB2030:60T02530EL5E2530 1250 IFS1<>3260T01300 1720 IFS1=123THENFLOTX+1,Y1,32:60SUB2030:60T01690EL5E2530 1260 PLOTX,Y1,P\$:PLOTX,Y," ":Y=Y1:60T01220 2000: 1270 IFS=123THENPLOTX,Y1,32:60SUB2030:60T01250 2010 REM 1280 IFS1=123THENPLOTX+1,Y1,32:60SUB2030 2020: 1290 GOTO2530 2030 FING:VT=VT+1:VB=VB+1:VV=VV+1 1300 IFS1=123THENPLOTX+1,Y1,32:60SUB2030:60T01260ELSE2530 2040 X3=INT(RND(1)#38)+1:Y3=INT(RND(1)#27) 1310 IFW<>1060T01090 2050 IFSCRN(X3,Y3)=32THENPLOTX3,Y3,123ELSE2040 1320 W\$=KEY\$:IFW\$<>**60TD1080 2060 IFVB=3THENVB=0ELSE2100 2070 X3=INT (RND(1) #38) +1: Y3=INT (RND(1) #26) 2080 IFSCRN(X3,Y3)<>320RSCRN(X3,Y3+1)<>3260T02070

More see



```
2090 PLOTX3, Y3, 124: PLOTX3, Y3+1, 127
  2100 IFVV=20THENVV=0:VI=VI+1:POKEXV,91:POKEXV+1,93:XV=XV+3
  2110 VT$=STR$(VT):L=LEN(VT$)-1:VT$=RIGHT$(VT$,L)
  2120 FDRI=1TOL:POKE48036+1,ASC(MID$(VT$,I,1)):NEXTI
  2130 RETURN
  2500 :
  2510 REM
  2520 :
  2530 EXPLODE
  2540 FORI=1T010:PLOTX,Y,P1$:WAIT5:PLOTX,Y,P$:WAIT5:NEXTI
  2550 PLOTX,Y," ":VI=VI-1
  2560 XV=XV-3:POKEXV,32:POKEXV+1,32
  2570 IFVI >060T01040
  2580 RETURN
  5000 :
  5010 REM
  5020 :
 5030 CLS:PAPER7
 5035 REM
 5040 FORI=48041T049081STEP40
 5050 POKEI, INT (RND(1)#7)
 5060 NEXTI
 5100 REM
 5110 POKE48001,1
 5120 PRINTCHR$ (20):CHR$ (17)
 5130 FORT=48002T048008STEP3
 5140 POKEI,91:POKEI+1.93
 5150 NEXTI
 5160 REM
 5170 X=INT(RND(1)#38)+1:Y=INT(RND(1)#26)
 5180 IFSCRN(X,Y)<>320RSCRN(X,Y+1)<>3260T05170
 5190 PLOTX,Y,124:PLOTX,Y+1,127
 5210 FORI=1T010
 .5220 X=INT(RND(1)$38)+1:Y=INT(RND(1)$27)
 5230 IFSCRN(X,Y)<>3260T05220
 5240 PLOTX,Y,123
 5250 NEXTI
 5260 RETURN
 5500 :
 5510 REM
 5520 :
5525 X=RMD(-FEEK(#276))
5530 PAPER6: INK4
5540 PRINTCHR$ (12)
5550 PRINT" ";CHR$(4);CHR$(27);"J
                                       *** THE BOTTLE ***
5560 PRINT:PRINT:PRINTCHR$(4)
5570 PRINTTAB(10)"A poor fuddled drunk is trying"
5580 PRINT"to get hold of the glasses surrounding him"
5590 PRINTTAB(15) "Help him manage with the 4 arrow keys or the joystick."
5600 PRINTTAB(10) "But as he has drunk too much,"
5610 PRINT don't let him take a bottle."
5620 PRINT or else he kills like lighning!!!"
5630 PRINTTAB(15) "As the drunk is one of "
5640 PRINT" a party of 3 mates, another of them"
5650 PRINT quickly comes to the rescue, so *
5660 PRINT"the same wretched fate awaits."
5670 PRINTTAB(10)"You lose the game when all"
5680 PRINT*the drunks are struck down.
5690 PRINTTAB(10) There are always 10 glasses in the game, ";
5700 PRINT"a bottle besides all 3 trick glasses."
5710 PRINTTAB(10) "Attracted by the booze-up,a"
5720 PRINT "companion comes to join the group"
5730 PRINT"all 20 emptied glasses"
5740 PRINT:PRINT"(Press any key to continue)";
5750 return
```

UNDERSTAND HEBDOLOGICIE THAT END Z CURRENTLY WORKING Н . שלנ n RANSLATING, BUT ALSO NOTES N WHICHSHE Ш TTE USERS
WITH THE
TO TYPE ı 0 HANDLED AGNE GI ON TRANSLATING ALL 먪 Z MANUAL (ATMOS IT IN, JUST SEND USED THOSE П FOR D.U.M RENCH DRIC 1) TASK WAS IN ENGLISH JOB Ζ D FOR RENCH GRAMS 0 DISCS THIS IS: MOST DOUBLE J ADVENTURE 욷 3 **ISSUE** ADMIRABLE. ,BUT ALSO THE USAGE SCICK D THOUGHT COULDN: BENEF FOR 픾 COVER

EFFORTS

Dave

PAGE 14

DEAR DAVE,

many thanks for sending on the de-bugged HPLANS. I ran it alongside the PC version, and it is now O.K. The agreement in results are exceedingly good considering the ORIC only has a single precision maths capability. Please convey my thanks to Judy Simms for typing it up, and to Trevor Shaw for for the bugs that I couldn't (I bet he drinks Carling Black

Trevor Shaw for for the bugs that I couldn't (I bet he distributed Label - or is it the other one??)

I enjoyed the bumper double issue of of OUM just recieved. Nick!, pity you didn't get a picture of the old man's stomach have filled the frame better than mine (stodgy food indeed!!).

- ROB (Kimbo) KIMBERLEY. Good photos - it would

DEAR KIMBO,

yes indeed thanks to Judy and Trevor. HPLANS DOW on it's way to Jon Haworth for the Public Domain. Regarding the photos; young Nick advises me that on the day photograph his dad as his 'CINEMASCOPE' camera couldn't cope! he couldn't

DEAR DAVE,

I enjoyed the ORIC MEET and as a result have recently received I enjoyed the ORIC MEET and as a result have recently received the SEDORIC DOS manual and am expecting my Interface anytime. In the July issue (page 12) you gave details of the FUNCTION KEY and SEDORIC DOS, and although Allan says in the Aug./Sept. issue of O.U.M that they are referenced in the manual; I agree that is what they are 'REFERENCED', and I rather like your explanation. Thank you. I just wanted to let you know that your effort has not been wasted. I would have liked to have seen some short examples attached to the use of files in the Manual. However I found some in the O.U.M. I close with a query - does LORIGRAPH print out only at 90 degrees on the printer?

- EDMUND WISNIEWSKI

DEAR EDMUND,

glad to be of help. Any little items of information users time will be printed as and when we get them. Regarding LORIGRAPH - I'm afraid it will only print out at 90 sideways. The reason is that the printed copy is twice the dimensions. One point on the screen is printed as a block of degrees size in all four the hard copy. As there is no line feed prior to or after a drawing, it allows one to print successive copies of different drawings and thus produce a 'frieze'

DEAR DAVE,

computer I now get my name on screen when the system boots up – JACK GOLDTHORPE (Leeds)

DEAR JACK,

thanks for the response. I also see from your letter that your other interests include Amateur Radio and Shooting. If you're a really good shot then perhaps Leeds United might sign you up as Eric Cantona is out injured for a while! (These are the jokes folks!)

J \mathbf{O} G \Box R Ι W

OUT NOW ON CASSETTE FOR 4 POUNDS YOU GET THE GAMES AND 1 pence CHANGE! Get it NOW direct from JON HAWORTH at his usual address. Please note that the tape version does not include the facility to save hiscores.

A GERNOE AT SCHNDINAVIAN SOFTHARE - Armt Erik Isaksen

Hello and welcome to my series on Oric software written by Scandinavians. I hope you enjoyed part 1 and let us now go onto part 2.

SLALON - RACE

This Danish game was released by OPEL in 1984. Written by Jan Bolhoj, it is also known as SLALOM SKI GAME, PARCHEN KIRCHEN and SKI - CUP. It is still available for purchase via the O.U.M mail order section. Up to 8 players can compete in this game to win the different tournaments. You can compete in tournaments for slalom, grand slalom or a combination of the two. The biggest tournament is the 'ORIC CUP', which can last for between 2 and 9 days. This is a game designed for people who like such software as TRIATHLON or WINTER GAMES. The game is only addictive if you have someone to compete against.

RATING: 67%

PLAYGROUMD 21

This Swedish title was released by IJK in 1985 and is a ladder game where you must paint 15 playgrounds' platforms. You must avoid all the obstacles and be wary about falling too far. The game itself is quite addictive and is a nice piece of software, even though the graphics and sounds are not excellent. The Swedish author, Mattias Gyllerup, has also written type-ins that were printed in 'Your Computer' back in 1984 (i.e. MAD JUMP and ORIC SPRITES).

RATING: 69%

HOOM BUGGY

Released in 1985 by the Norwegian company 'Computer World Norge'; this is a version of the famous game 'Moon Buggy' written by in Basic by Staale Eikebraaten. Everyone knows the idea of the game, which was part of the 'O.N. PACK' released by me a couple of years ago. It was withdrawn from sale when our famous editor Dave Dick had reviewed it. His comment for MOON BUGGY was: "Is the hi-score of 1872 that is shown really a hi-score or the year it was written?".

This game shows how much Staale has improved his programming skills, as his later games (i.e. CHESS MADNESS, DRUDGERY, CAR MADNESS and ROCKRUN) are of much better quality.

RATING: 44%

ORIC EMGELSK

Released in 1983 by the Norwegian company - AD ELEKTRONIKK. The best ever educational program I have seen for the Oric. The program written in Norwegian helps to improve their English grammar, i.e. inflection of adverbs, nouns or verbs, and the use of "to do". After each test a mark will be given for the performance. The program can also be used to learn vocables. British parents can dream about a similar program for their children, i.e. to improve French or German grammar.

RATING: Excellent (for Scandinavians)

MEXT MONTH I MILL LOOK AT FURTHER TITLES, INCLUDING: — "DANGEROUS MAM", "GUBBIE" and "MONR LISA"

Machine Code for the Oric Atmos (Part 19) Peter N. Bragg

The Story so far

programming on the Oric. In Part 16 of the series, what had been covered so far, was summarised and put together to provide a small, simple machine code programming kit. This consisted of a small Instruction Subset, basically, a few essential instructions, plus a couple of Operating System calls to read the keyboard and write to the display screen. A reference column was included to locate information on the various items, if required. Since then we have had a brief look at the use of sub-routines and also how to organise our programs in order to make them easier to write.

Now for some clever bits !

Counting on it

from a value can be very useful if you are thinking of producing a counter or timer, so this time we will have a look at instructions with this in mind. Obviously timers and counters are useful for games software and they also have many other uses too. Let's have a look at simple counters first and how they can be made to count up or down.

The first item that we can look at is the Accumulator. Strictly speaking, the Accumulatator cannot be incremented or decremented directly with a single instruction, or at least, not on the standard Oric.

There are some versions of the 6502 microprocessor, with extra instructions, including some that do increment and decrement the Accumulator contents. I have heard that it is possible to fit one of these 6502's to the Oric, but of course there is a snaq. If you do this and then use any of those extra instructions in a program, it will automatically become incompatible with the majority of machines, that use the 6502 microprocessor. For me, that compatibility with all 6502 machines is one of the advantages of using machine code and is worth more than a small increase in efficiency, but of course this is a matter of personal choice.

Probably, the best way to increment or decrement the Accumulator contents, is to use the ADC and SBC instructions, which we met back in Part 6 of the series.

However, the Accumulator is the most useful register in the Oric's 6502 and it would be a bit of a waste to tie it up, with a simple counting operation.

There are two other registers that we can use for this purpose. These are Register X and Register Y.

Register X

----- We met Register X back in Part 15 of the series, when we were looking at the Operating System display call "VDU". Register X, was used by that particular call. Up to now, the series has used Register X just for storage purposes. In fact Register X is far more useful doing other things, rather than just providing simple storage.

Register Y

----- This is essentially the twin brother of Register X, described above. In many respects, Register X and Register Y are very similar to each other in operation. Register Y also holds one byte which can be loaded and stored in the similar fashion to the Accumulator and Register X. For Register Y, the loading and storing instructions are LDY and STY. Hopefully by now, you should be able to see what those abbreviations mean, by comparing them with those for Register X.

"Counter X" and "Counter Y"

One thing you should remember is that they can only hold one byte each, so they can only count up to a maximum of 256 decimal or FF in hex. This means, for example, that if Register X contains FF and you increment it (add 01), it's contents will go to 00. Likewise, if Register X contains 00 and you decrement it (subtract 01), the contents will go to FF. So if you continually increment the one byte value, it will eventually reach the stage where it goes FD, FE, FF, 00, 01, 02 and so on. If you decrement it instead, it will go the other way ie. 02, 01, 00, FF, FE, FD etc. This effect is known as wraparound and happens to both hex and decimal values.

The usual thing is to have some way of testing the value in the Register that you are using as a counter, so that you know when it reaches the required value. There are two ways of doing this. You can either start at zero (00) and increment and test until it reaches the required value, or you can load the required value into the Register and decrement it until it reaches zero (00). The second option is usually favourites, because it can use the Zero Flag in the Status Register to produce a Branch jump at the appropriate time, without the need to test for the zero value.

The two instructions for incrementing and decrementing Register X are INX and DEX, which are abbreviations for INcrement X and DEcrement X. These are single byte instructions and their instruction opcodes are E8 for INX and CA for DEX. Likewise, the instruction, INY (opcode C8) increments the contents of Register Y and the instruction, DEY (opcode 88) will decrement them.

Thanks for the memory !

a counter. You can also use the contents of a memory location. In this case, the increment and decrement operation needs a three byte instruction each. The first byte is the instruction opcode as usual and of course the other two bytes are the address of the memory location that you are using for a counter. As each memory location only holds one byte, the same rules apply as for Registers X and Y. Once again, the value wraps around from FF to 00 when incrementing and vice versa, when decrementing.

Lots and Lots !

------ A one byte value of 256dec/100hex may not sound much, but of course, you can always couple two or more counters together in order to multiply that value. With two counters for example, you can count from 00 to FF on one counter and increment a second counter once for each time the first counter goes from 00 to FF. This pairing will count up to 65536dec/FFFFhex and of course the more one byte counters that you couple together in this way, the higher they will count.

We appologise to passengers for the short delay !

(or clock) works by producing a short but accurate time delay period, repeating it over and over again and recording those repeats, by incrementing (or decrementing) a counter. The time delay period in a clock can be produced in many ways, by vibrating a crystal or swinging a lump of lead (I know of one or two people who can do that too !!). The Oric has a crystal which provides very accurate timing for instructions, but this produces one million ticks a second. (I hope that there are no cattle farmers reading this !!). One the simplest timing routines is the one shown below, which works by using Registers X and Y to count up the number of times that a short sequence of instructions is used.

19 Sep 92 Demo Routine Oric ____ ----[/] [CALL#1010]----- TIME DELAY LOOP]--------Starting Gun------start---: Fire ! they're off !! 1010:20 B5 FA : JSR FAB5 ---Set X and Y Counters---Set both for : Set X : LDX# 256 1013:A2 FF maximum time period. : Set Y : LDY# 256 1015:A0 FF ---Countdown Y---: DEY : Decrement Y (-01) then 1017:88 : BNE "1017" : if Y not zero - back to Decrement Y again. 1018:D0 FD if Y is zero - continue on to..... ---Countdown X---: Decrement X (-01) then : DEX 101A: CA : BNE "1017" : if X not zero - back to Decrement Y again. 101B:D0 FA if X is zero too - finish.... ---Finish---: Shoot again to mark the finish. 101D:20 B5 FA : JSR FAB5 : Exit. : RTS 1020:60 ---end---

The above routine is in fact two counters or loops. The "Countdown Y" is the short one and "Countdown X" is the long one, with respect to time. Like a small gear wheel in a clock, Register Y whizzes round, through the complete range of one byte values, whereas the Register X is slower and only moves one notch for each complete cycle of Register Y. The start and finish are marked by one of the Oric's sound effects. The delay produced by the two counters is about quarter of a second, during which, they count up to 65536 |

It was great to be there at the 1992 Oric meet in July and nice to be able to talk to other Oric users face to face and meet people who are usually just names in the pages of O.U.M. I now have an Oric badge to wear at "Acorn User Show". There was much to see and hear about. There were useful tips on self defence from Judy Simms and an interesting chat with Jim Patterson all the way from Scotland, not too mention the Daves D & W. Jon H and Allan, some interesting software from Jonathon Bristow and much more. I was surprised at the interest in the ancient Microtan, pity the tape loading was temporarily on the blink! If you missed it all, make a date for next year and join the fun. To Dave and others who put it all together, thanks a lot!

the property of the second of the second sec

MESSAGE TO JAMES GROOM FROM JOHN PEACH

If you are having difficulty in obtaining a 'DRAGON', th Computers' of Oldham. They sell them for about 30 pounds. then try 'P.S.E

HI - SCORES

ATLANTID - 13,990 by Matthew Dick CHUCKFORD - 112,372 (level 27) by Peter Thornburn

Dr.PAUL JOHNSON - the interview

Readers may remember that some months ago I spoke of a conversation with Paul and got his agreement to answer my interview questions. I have recently tried to contact him again. Unfortunately he was in conference. His secretary said that he had been very busy and that he would phone me back. In the words of Diana Ross, "I'm still waiting!".

I remember when I first spoke to one of his associates (Marilyn Bell), that she seemed rather willing to inform me that Paul was the only Oric director to keep his big house in Ascot. Perhaps I should of offered a fee for the interview!

fee for the interview!

_______ COLIN COOK talks cameras to PETER BRAGG

Here in Colin's own words are his memories and his thoughts for the future:-

I greatly enjoyed the ORIC MEET and have hardly known a day pass so quickly with so much going on. I was quite impressed with Peter Bragg's camera, which offered glimpses of a possible means to get text and graphics directly into the computer from a printed page, rather like scanners do with the newer 16 bit computers. I would like through the pages of O.U.M to encourage Peter to progress with the device, perhaps by incorporating some kind of internal positioning arrangement to move the incorporating some kind of internal positioning arrangement to move the light - sensitive chip down the picture, thus allowing a user to capture a whole screenful of text or graphics by making a composite of 4 'slices', and so avoiding any blind areas. I am sure enough Atmos users would find such a device worth buying if it was possible to make it for less than, 'slices'say, 50 pounds."

N R I

Apologies from Denis Bonfield. He says that he missed one Poke from those given in the last O.U.M for ORION (Lothlorien) to run on the Atmos. The one you need also is:-

POKE HANDE, HYG

A STUDIOUS MAN

Best wishes to Robert Crisp, who will be studying for a couple of and GUILDS' until Easter.

GONE FOR A BURTON

Some more hi-scores. This time from Graeme Burton.

KINGDOM - 109 GUBBIE - 90,860

3D FONGUS - 18,100

Now come on Graeme; how about having a go at beating Denis and Henry's scores on TETRIX! _________

THE FIRST OUN DISC IS OUT HOM!

AND IS CHEY 3.50 IT IS FULL OF INTEREST

QUICKIES FROM THE EDITOR

IDTS OF LITTLE ODD ITEMS TO FIT INTO THIS ISSUE AND SO ON WE GO.

THE DAVID HALL SALE

David informs me that he still has plenty of software to sell. See last issue of D.U.M for fuller details or ring him on 02537 66576.

THE FRENCH CONNECTION

I was delighted to receive a telephone call recently from Laurent Chiacchierini in Paris. He passes on his congratulations to Henry Marke for completing his MAHJONG and tells me that as a prize, Henry will be recieving CED discs/magazines.

Whilst thinking of Henry, he has found a bug in ZEBULON as has Laurent. Those who have already bought Zebulon will be

supplied with an updated version.

SQUEEK 2

Just recieved from Jonathan Bristow is his latest title - SQUEEK 2. There are 9 levels to this arcade/strategy game. It will appear on OUMDISC 1.

SQUINT!

Have recently recieved a letter from the ever busy Colin Cook. His latest idea is to get as many characters on the Oric screen as possible, whilst maintaining legibility. To do this he had to redesign the entire character set to a smaller size, and use the HIRES screen to plot them. using the CHAR command in HIRES mode, one can plot a character in any position, even overlapping another character, and thus make use of the extra space made available by the smaller characters.

Typing on the HIRES screen is not as simple as that, of course. The computer has to be told where to plot each character in relation to the previous one, so the program that Colin used to type a letter to me had to load an array from disc first, which tells it how many pixels to advance after the last character.

Colin dumped the text of his letter from the HIRES screen to pixel mode. It can show a screen width of some 68 columns, dependant on width of characters.

The letter was then outputted to a TANDY CGP 115 (similar specification to the MCP 40). I must admit that it is quite readable compared to the normal print from this little printer.

EVERYONE SAY 'AAH'

A slight disappointment for Colin Cook at the ORIC MEET was the fact that there were no talking ORIC's on show. He was hoping that someone may have built the speech synthesiser available from the old MAPLIN catalogue. Well Colin, you should of asked me. There tucked in a box in a corner there was the self same thing. The club had

bought it off Richard King for Frank Bolton. I don't know how Frank has progressed with it. He might even sell it to you Colin if it doesn't meet his requirements.

IT'S HIM AGAIN!

I think I should of called this Colin's page. Anyway, Colin wants a working compiler for the ATMOS. Colin has T-COMP from Program Factory, but needs something for loops, faster arithmetic and moving graphics routines. Well if my memory serves me right, ISOSOFT released one. I think it has quite a good French manual! Can anyone help Colin. Failing that he will have to join the queue for a TELESTRAT!

NOT SO MUCH A LETTER; MORE A WAY OF LIFE!

I have recently received a letter from an Oric user who is NOT a reader of O.U.M. One particular sentence in it had be totally bemused.

I think we will make this COMPETITION time. Firstly the sentence in question, and I quote:

"The idea of buying a new Oric Disc recording set-up has been flitting around in my mind for some time - and I have to think also about the transitory and predictable nature of popular economic and political sentiments."

My Economics book by LYPSEY gives me no clues how to answer this point And David Icke said that the Oric was not in

his manifesto as it was not Green!

COMPETITION - the next 3 issues of OUM free to the person who sends me the most apt reply to this gentleman's dilemma. The only rule is that the word "CR.P" must not be used in the text!

WANTED

John Peach is on the look out for back issues of some Oric magazines. He would like originals if possible or else photocopies. The magazines and issues required are: -

I.O.U.6 - issues 1-6 (incl.), 8,13,20,21 and 23.

MICR'ORIC - all 10 issues.

THE 'ORIC - issues 1-6 (incl.), 8 -14 (incl.), 16,17,19,25,26,27 and 36.

ORIC COMPUTING - all 6 issues except for issue 2.

John has asked me to deal with any response to his plea on his behalf. So if you have any of the above to dispose of, please contact me here at 0.U.M.

MORE QUICKIES FROM THE EDITO F

TIP FROM KIMBO

Rob Kimberley has only recently re-installed his Oric system on a computer trolley next to his PC. The only space for the disc drive was on the top shelf of the trolley between the Oric monitor and the PC monitor. With both monitors on he got READ errors. Switching off the PC and all is fine. Rob says that readers who get those annoying random disc errors on Sedoric which they can't explain, should perhaps try moving their monitor away a few inches from the disc drive.

TAPE TO DISC

The article on TAPE TO DISC in this issue from Colin Cook was originally intended for the 'YOUR ORIC' magazine. It is meant by Colin to backup their own cassette programs and at the time it was written there was no abundance of disc software. With the advent of utilities such as BDDISK it is perhaps a little outdated nowadays, but I feel will still benefit users of ORICDOS and will help in the transfer of programs which even the likes of BDDISK perhaps cannot handle. I also feel that some of the information in this and the next part of the article maybe of some help to disc users and programmers alike.

THE ORIC SERIAL PORT

Due to time constraints, Trevor Shaw has not been able to finish the FILE TRANSFER PROGRAM as mentioned in Part 4 of his articles on the Serial Port.

After a chat with Trevor the other evening, we have further decided that rather than to print the whole listing; it may be more beneficial and less time consuming to users if the finished program were put into the Public Domain or released on a future OUMDISC.

ELDORADO or EL-DORADO!

Frank Bolton has recently sent me some of his Spanish lessons. Whilst I have used some on the current OUMDISC, I feel that as there are some 70 lessons in all, that it may be wise at some point to release the whole set via Public Domain. I would appreciate a response from readers on this subject as we do not want to put a lot of effort into something that will not be used.

There now follows Frank's introduction to his programs:

"I think an explanation of the Spanish lessons is appropriate. Most tapes and discs sell a kind of dictionary thingie,

"I think an explanation of the Spanish lessons is appropriate. Most tapes and discs sell a kind of dictionary thingie,
which is designed to teach you and test you in individual words. Seldom do you get a course which explains the points
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to give people a good
of grammar and takes you through them in simple steps with examples. My course is designed, not to grammar and takes you through the grammar and t

way of drilling to achieve fluency in handling those points.
When we learn a language at our mother's knee we don't need the grammar to be able to use it. But when we have to learn another language quickly, it helps to have rules to go by. For instance when'l am teaching English to foreigners I another language quickly, it helps to have rules to go by. For instance when'l am teaching English to foreigners I teach them things that you know, but that you don't know that you know (if you see what I mean). One such thing is this teach them things that you know, but that you don't know that you know (if you see what I mean). One such thing is this teach them things that you know, but that you don't know that you know (if you see what I mean). One such thing is this If a word ends in a vowel and 'L' then if there is only ONE vowel in the word it will end in vowel + LL but if there are TWO vowels in the word it will end in vowel + 'L'. This is why FULL has LL, but WONDERFUL and HELPFUL etc. all have one L. Try it - HEEL, CALL, BELL, LEVEL, TOLL, FOOL etc. (exceptions are when there is VOWEL + R or VOWEL + W when there is

always only ONE L...CRAWL, GIRL etc.)
It also explains why UNTIL had to grab an extra L when it became TILL. Now this is never taught to English children (pity really as it helps with spelling), but it's bloody handy when a foreigner is learning English.
Most of my lessons are of that nature , designed to help someone who is learning Spanish rather than give him a lot of words to learn. Though I have started a section of phrases and you will see that in some of the early lessons which are

of grammar and phrases.

Well Frank, I wonder how many people can say they haven't learnt something from you already!

MSDOS

The current issue of the CEO-MAG contains the listing for copying MSDOS discs to the ORIC. Laurent tells me that it will also be on the next CEO DISC (due shortly) and will also be available to non-CEO subscribers via Jon Haworths Public Domain.

THAT'S YER LOT

Well as usual we have run out of space. Apologies if your item was not included. I think in future that I will be have to be stricter with DEADLINES. Therefore the deadline for the November issue is OCTOBER 26th.

ANY and I mean ANY articles recieved later than the 26th OCTOBER will be held over until the next month.

ORIC ATMOS and ORIC-1 GRAPHICS & MACHINE CODE TECHNIQUES

Chapter 4 - THE KEYBOARD AND CASSETTE SYSTEM

4.1 Keyboard (continued) INDEPENDENT KEYPRESS ROUTINE The normal method of detecting keypresses is slow and inefficient, since the whole keyboard must be scanned 33 times a second and interrupts must be running for this to happen. More importantly, the limitation of being able to read only one key at a time can be a real hurdle when writing a game program. Program 4.1 shows a short subroutine that examines only one key and sets the zero flag to reflect the state of the key. In other words, the zero flag is set when the key is not pressed and clear when the key is pressed.

```
4000: 08
                PHP
4001:
      78
                SEI
4002:
      48
                PHA
4003: A9 OE
                LDA
                     #$0E
4005: 20 90 F5
                JSR
                     $F590
                                  Note: ORIC-1 users should use location $F535
4008: 68
                PLA
4009: 09 B8
                ORA
                     #$B8
400B: 8D 00 03
                STA
                     $0300
400E: A2 04
                LDX
                     #$04
                                         Program 4.1 Read keyboard subroutine
4010: CA
                DEX
4011: DO FD
                BNE
                     $4010
4013: AD 00 03 LDA
                     $0300
4016: 29 08
                AND
                     #$08
4018: AA
                TAX
4019: 28
                PLP
401A: 8A
                TXA
401B: 60
                RTS
```

This subroutine can be used for any number of keys simultaneously. It requires two registers to be set up: the accumulator should contain the row number (0-7) and the X register should be set to the column number. The column number is one bit cleared in a byte containing #FF, i.e. #7F, #BF, #DF, #EF, #FT, #FB, #FD or #FE. As with location #208, the required values do not fall in a recognisable pattern. (N.B. As I said last time, this is not correct and order can be obtained by studying the appropriate appendix in the Advanced User Guide)

- **4.2 Cassette** input/output This section will describe the various ways in which the cassette system can be used. There are three programs described in this part of the chapter, each giving an extra facility that can be used from BASIC. The routines in ROM that allow cassette I/O are neatly structured so that saving and loading can be done either:
 - 1 As a complete section of memory.
 - 2 One byte at a time
 - 3 One bit at a time

The third option is not used in this chapter, most applications are only concerned with whole bytes. However, section 9.1 - speech synthesis - shows how bits can be read from the cassette hardware. Saving and loading bytes is often more useful than saving a large area since you can have a free hand as to the exact format of your data on tape. This is one subject where the two versions of ROM differ greatly: both the subroutine addresses and the usage of page 0 and page 2 are altered. Details are covered in the Advanced User Guide so I do not propose to go into it again.

4.3 Saving an area of memory Covered in the Advanced User Guide. SUBROUTINES REQUIRED In order to save a block of memory, having set up the speed, start address, etc., you must call a series of subroutines:

```
1 For version 1.1:
                                    JSR
                                            $E76A (interrupts off)
                                    JSR
                                            $E585 (print 'saving')
                                            $E607 (save header record)
                                    JSR
                                            $E62E (save area of memory)
                                    JSR
                                    JSR
                                            $E93D (interrupts on)
       2 For version 1.0:
                                    JSR
                                            $E6CA (interrupts off)
                                    JSR
                                            $E57B (save)
                                    JSR
                                            $E804 (interrupts on)
4.4 Loading an area of memory
                                    Covered in the Advanced User Guide.
SUBROUTINES REQUIRED In order to load a tape file, call the following subroutines:
       1 For version 1.1:
                                    JSR
                                           $E76A (interrupts off)
                                    JSR
                                           $E57D (print 'searching')
                                    JSR
                                           $E4AC (find file)
                                    JSR
                                           $E59B (print 'searching')
                                    JSR
                                           $E4E0 (load file, or verify)
                                    JSR
                                           $E93D (interrupts on)
       2 For version 1.0:
                                    JSR
                                           $E6CA (interrupts off)
                                    JSR
                                           $E4A8 (search and load)
                                    JSR
                                           $E804 (interrupts on)
```

Note that these subroutines are not exactly the same as a CLOAD command. No error messages are printed and, in addition to this, the program will not autorun. On V1.1, the routine that prints a message on the top line is patched via a jump at #241. This may be (carefully!) altered in order top add your own processing at either the 'search' or 'load' phase. Yet a further important difference between the two ROM versions exists when a BASIC program is loaded. On V1.1 a subroutine is called which relinks all the lines in the program. This prevents problems arising when the links have been corrupted during loading, and allows the 'join' facility to create an executable program. This is not done on V1.0, so be warned that if you deliberately upset the links (one reason would be to stop 'LIST' from working) you will find V1.1 ROMs correct your vandalism! If you are mixing machine code with BASIC, be sure to end your BASIC program with a link between #00 and #FF (see Chapter 2), or you may find some of your machine code gets corrupted.

SUMMARY OF ROM SUBROUTINES In order to save and load data, byte by byte, here is a list of all important addresses.

1 \$E5F5 Clear top line (\$E563)

\$F865 Print message on top line (addressed by A=low, Y=high, at position X) (\$F436)

\$E735 Find header (\$E696)

\$E6C9 Read one byte into accumulator (\$E630)

\$E57A Output header (\$E6BA)

\$E65E Output byte from accumulator (\$E5C6)

Note that the 'header' referred to above is just the sequence of 259 lots of '#16' - not the header record.

- **4.5 A verify** facility for version 1.0 Since most users have the ATMOS which has a verify facility and that the 'ORIC-1 Extended BASIC', by Severn software (see Dave Dick), tape has a verify facility for the ORIC-1 I do not propose to include this machine code program in this article.
- **4.6 CLOAD** with an exit One irritation when loading a program is that there is no easy way to stop a CLOAD. Ctrl-C does not work, of course (the keyboard is not scanned during cassette I/O), and the only resort is the 'Reset' button. While there is simply not enough time between loading each byte to scan the whole keyboard, it is possible to examine one particular key.

Next month -- more of Chapter 4 and CLOAD with an exit.

DISC BASIC (SEDORIC DOS) (OUM 62)

This month, I'll continue where I left off before, with an example of a simple sequential access file and its corresponding program. I believe that readers are interested in SEDORIC DOS only so I will concentrate on that format. In doing this I can pack more information into the pages available to me.

So the listing for a BASIC program to create, print, amend, search and copy a simple directory file; in this case a telephone directory, is as follows. This listing has been printed from my ATMOS and is a working program (says he confidently); at least it works on my system.

```
100 REM ***** PHONE ****
110 REM --- INITIALISATION ---
120 F$="PFILE.DAT"
130 CLS
140 PRINT TAB(10); "PHONE DIRECTORY"
150 PRINT:PRINT
160 PRINT TAB(10); "1 = Create directory"
170 PRINT TAB(10); "2 = Print directory"
180 PRINT TAB(10); "3 = Add new name and number"
190 PRINT TAB(10); "4 = Search for name"
200 PRINT TAB(10); "5 = Delete name and number"
210 PRINT TAB(10); "6 = Copy directory"
220 PRINT TAB(10): "7 = End"
230 PRINT: PRINT
240 PRINT TAB(10); "Select number, please"
250 INPUT MS
260 IF MS<1 OR MS>7 THEN 140
270 DN MS GOSUB 1000,2000,3000,4000,5000,6000,9999
280 GCTO 130
290 REM -----
300 REM
1000 REM ---- CREATE PFILE ----
1010 GOSUB 1200: REM Open FFILE for output
1020 CLS
1030 PRINT "TYPE NAME AND PHONE NUMBER (*** = STOP)":PRINT
1040 INPUT "NAME": N$
 050 IF Ns="***" THEN 1120
1060 INPUT "PHONE NUMBER";P$
1070 INPUT "CORRECT? (Y/N)"; A$
1080 IF A$<>"Y" THEN PRINT "ERROR, PLEASE RE-ENTER":GOTO1040
1090 PUT1, N$.P$
1100 PRINT: PRINT
1110 GOTO 1030
1120 GOSUB 1300: REM CLOSE PFILE
1130 RETURN
1135 REM
1140 REM -----
1200 REM ---- OPEN FPFILE FOR OUTPUT ----
1210 OPEN S.F$.1
1220 RETURN
1300 REM ---- CLOSE PFILE ----
1310 CLOSE 1
1320 RETURN
1325 REM
```

OUM issue 62

```
2000 REM ---- READ AND PRINT FILE ----
2010 CLS
2020 GOSUB 2200: REM OPEN PFILE FOR INPUT
2030 PRINT "LIST OF PHONE NUMBERS"
2040 PRINT "----
2050 IF (-&(1)) THEN 2090
2060 TAKE 1,N$,P$
2070 PRINT N$; TAB(20); P$
2080 GOTO 2050
2090 GOSUB 1300
2100 PRINT: PRINT
2110 INPUT "CONTINUE? (Y/N)"; A$
2120 IF A$<>"Y" THEN 2110
2130 RETURN
2140 REM
2200 REM ---- OPEN PFILE FOR INPUT ----
2210 OPEN S.F$.1
2220 RETURN -
2225 REM
2230 REM -----
3000 REM ---- ADD NEW NAMES AND NUMBERS ----
3010 GOSUB 3200: REM OPEN PFILE FOR APPEND
3020 CLS
3030 PRINT "TYPE NAME AND PHONE NUMBER (*** = STOP)":PRINT
3040 INPUT "NAME"; N$
3050 IF N$="***" THEN 3120
3060 INPUT "PHONE NUMBER"; P$
3070 INPUT "CORRECT? (Y/N)"; A$
3080 IF A$<>"Y" THEN 3040
3090 PUT 1,N$,F$
3100 PRINT: PRINT
3110 GOTO 3030
3120 GOSUR 1300
3130 RETURN
3140 REM
3200 REM ---- OPEN PFILE FOR APPEND ----
3210 OPEN S,F$,1:APPEND 1
3220 RETURN
3225 REM
3230 REM -----
4000 REM ---- SEARCH FOR NAME ----
4010 CLS
4020 INPUT "NAME TO SEARCH FOR"; S$
4030 GOSUB 2200: REM OPEN PFILE FOR INPUT
4040 IF (-&(1)) THEN 4090
4050 TAKE 1,N$,P$
4060 IF N$<>S$ THEN 4040
4070 PRINT "FOUND: ": PRINT N$, P$
4080 GOTO4100
4090 PRINT "NAME NOT FOUND"
4100 INPUT "CONTINUE? (Y/N)":A$
4110 IF A$<>"Y" THEN 4100
4120 GOSUB 1300: REM CLOSE PFILE
4130 RETURN
4135 REM
4140 REM -----
```

OUM issue 62

5010 CLS 5020 INPUT "NAME TO DELETE"; ND\$

5030 GOSUB 2200: REM OPEN PFILE FOR INPUT 5040 GOSUB 5300: REM OPEN TEMP FOR OUTPUT

5000 REM ---- DELETE NAME AND NUMBER ----

5050 IF (-&(1)) THEN 5100

5060 : TAKE 1,N\$,P\$

5070 : IF N\$=ND\$ THEN 5050

5080 : PUT 2,N\$,P\$

5090 **GOTO 5050**

5100 GOSUB 5400: REM CLOSE TEMP

5110 GOSUB 5500: REM DELETE PFILE

5120 GOSUB 5600: REM RENAME TEMP TO PFILE

5130 RETURN

5140 REM

5300 REM ---- OPEN TEMP FOR OUTPUT ----

5310 OPEN S. "TEMP. DAT". 2

5320 RETURN

5330 REM

5400 REM ---- CLOSE TEMP ----

5410 CLOSE 2

5420 RETURN

5430 REM

5500 REM ---- DELETE PFILE ----

5510 CLOSE 1:DEL F\$

5520 RETURN

5530 REM -----

5600 REM ---- RENAME TEMP TO PFILE ----

5610 REN "TEMP.DAT" TO F\$

5620 RETURN

5630 REM

6000 REM ---- COPY PFILE TO PFILE2 ----

6010 CLS

6020 COPY F\$ TO LEFT\$(F\$,5)+"2.DAT"

6030 RETURN

6040 REM -----

9999 END

Those of you who remember or have compiled the listings for this program from the previous issues will appreciate the simplicity of the SEDORIC file commands, where the same command can be used for opening a file for input or for output.

Next month, I will make some small changes to the program to remove unnecessary sub-routines and to create the menu options on a sequential file so that some form of configurability is obtained without having to modify the program itself. In this way it is possoble to use the same BASIC program to compile a telephone directory, a book list, or any other sort of simple list that you fancy.

ORIC ENTHUSIASTS Price List (Autumn 1992)

SHAREWARE DISC SOFTWARE

ORICOMMS (ATMOS), by Trevor Shaw/John Rushton - £1.00, registration/manual £3.00
MEGABASE by Geoff Phillips - £1.00, registration and manual £3.00
SEDORIC DOS (V2.0) update by Dr Ray McLoughlin - 50p, registration/manual £7.50
(42 registered users)
GRAPHPAD, ORIC Enthusiasts - 50p, registration & instructs £1.00
E-FILE by Geoff Phillips - 50p, registration/instructs £2.00
(2 registered users)
ONE-KEY BASIC by Allan Whitaker - 50p, registration & instructs £2.00
WORD-SPEED by Dr Ray McLaughlin - £1.00, registration/manual £7.00
(13 registered users)
DISC-FORTH by Dave Cheeseman - 50p, registration & instructs £2.00
(2 registered users)

HARDWARE AND OTHER PRODUCTS

Blank C15 cassettes	50p	Byte Drive Disc System
Blank 3.5" discs	80p	Power Supply Unit £17.00
Blank 5.25" discs	80p	(supplies 2 drives
EEPROMs, 27128s	£3.00	with +12v and +5v)
ORIC ATMOS Label	30p	ORIC cassette lead £1.50
ORIC Label	30p	(3-pin to 3-pin DIN)
ORIC TV Lead		ORIC-1 keyboard overlays 50p
ORIC-1 Label		V1.1 ROM + instructions £5.00
34-way edge connect	or, suitab	le for 3" & 5.25" disc drive data cables £1.00

BOOKS FOR SALE

An Introduction To Programming The ORIC-1 - R.A. & J.W. Penfold	75p
Easy Programming For The ORIC-1 - Ian Stewart & Robin Jones	£1.00
Games For Your ORIC - Peter Shaw	£1.50
Games To Play On Your ORIC-1 - Czes Kosniowski	£1.00
Getting Started on the ORIC-1 - D.G.J. Cole	£1.00
Meteoric Programming For The ORIC-1 - John Vander Reyden	£1.00
ORIC Advanced User Guide - Leycester Whewell	£3.00
ORIC ATMOS Manual - Ian Adamson (also Spanish version)	£3.00
ORIC-1 BASIC Programming Manual - John Scriven	£1.00
The ORIC Book Of Games - Mike James, S.M. Gee & Kay Ewbank	£1.50
The ORIC Handbook - Peter Lupton & Fraser Robinson	£1.50
The ORIC Programmer - S. M. Gee and Mike James	£1.50
The ORIC-1 And How To Get The Most From It - Ian Sinclair	£1.00
The ORIC-1 Companion - Bob Maunder	£1.00
The ORIC-1 Program Book - Vince Apps	£1.00
30 Hour BASIC (ORIC Edition) - Clive Prigmore	£3.00

POSTAGE & PACKAGING - This is included in th cost for dispatch within the U.K., B.F.P.O. and the Channel Islands. With most orders the item(s) will be sent within a week of receipt of order but please allow 28 days for delivery.

PAYMENT & ORDERS - Send cheques/P.O.s payable to Mr A. Whitaker in pounds STERLING addressed to ORIC Enthusiasts, 8 Staley Hall Road, Stalybridge, Cheshire, SK15 3DT. Cheques will not be cashed until the order is sent out. Pleasering outside office hours for personal attention. tel: 061-303-7369. Any faulty items must be returned within 4 weeks of invoice. Please use a certificate of posting.