TI*MES

Vol.2.No.6. Summer Issue June 2016

Workshop//AGM at Pillings Lock Marina//Quorn

In the weekend of April 1, 2 and 3, a small group of TI Users met for the Annual General Meeting of the T.I User Group of the United Kingdom – The Chairman of the Group Trevor Stevens chose a beautiful place in the Midlands called PILLINGS LOCK MARINA a few miles from Leicester City near Barrow-Upon-Soar – We were also visited by two members of the Official TI Gebruikersgroep of the Netherlands over this three day weekend – Inside of this Issue of TI*MES you will find a full report and review of our TIUGUK AGM 2016 and much much more.

TI*MES Magazine
A Twice A Year Publication of the T.I.U.G.U.K.
Texas Instruments User Group of the United Kingdom

IN THIS ISSUE

Layout and Editorial of this issue by ----- David Caine and Berry Harmsen ---The last day of publishing articles for TI*MES volume 2 number 7 will be Nov 30th. 2016. ------The next issue of TI*MES magazine will appear in the middle of ---- December 2016

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Welcome all.
croesawu pob.
Welkom allemaal.
velkommen alle.
Benvenuti a tutti.
Willkommen alle
Välkommen alla
Todos bienvenidos
Aloha a pau

Pillings Lock Marina AGM.   (A review)

PANORAMIC VIEW FROM PENTHOUSE SUITE OVER MARINA

At 9am this fine Friday morning 1ˢᵗ April my destination by train was from my hometown in Crewe County Cheshire to Pillings Lock Marina Leicestershire with a large suitcase full of electronic TI equipment and another small suitcase with my clothes and items to keep me going until the following Monday, distance by train about 150km with a cost of about £40 return and a change of trains four times which included a stop at Birmingham International to meet up with our Contributing Editor Berry Harmsen from the Netherlands, and a very dear friend of mine, as he had just arrived from Amsterdam by KLM.

We had a coffee and something to eat at the station top

VIEW OF REAR OF PENTHOUSE SUITE

just to keep us going and then by train on to Nuneaton and then Coventry then Leicester and then our last stop at Barrow upon Soar where our very good friend Ronald Kalwij was waiting in his car to give us a lift to Pillings Lock distance about 1km, Ronald had also traveled from the Netherlands by Boat with his car about three days before and he was staying in a guest house in Loughbrough about 2km distance.

On arrival at Pilling Lock at 3pm about 100mt from the main carriageway there is a large car park and at the water's edge is the Apartment Building quite large with washing, cleaning and Maintenance facilities for the Boats at the rear and at the front overlooking the Marina is the Apartments above and below the Boat Hire and Trips office and a wonderfull medium sized top class

bar and restaurant with a veranda which curved out over the water which made the whole experience most appealing.

PANORAMIC VIEW ACROSS APARTMENT

Trevor was there to meet us as he had organized our stay as well as the AGM, as he and his Wife Sue are now living on a narrow boat on the Marina. Once inside our Apartment Penthouse suite it was up the stairs with our suitcases and while Berry was in his room unpacking getting ready I began the task of putting my TI portable kit together which included a Beige TI console converted from USA to UK Motherboard, a standalone TI ss/sd disk controller, a speech synthesizer, a Boxcar 32k memory, Cumana dual 3 ½" external floppy disk drives, a pair of Gemini Mini Gemstik Joysticks, then fixed all this up to my Cello 15" LCD TV/Monitor and after last year converting this console to VGA, I connected up to my TV/Monitor **VGA** for **PICTURE IMAGE** and

LUNCH ON FIRST DAY

COMPONENT cable for **SOUND IMAGE** and after triple checking connections all was well. **FRIDAY 4pm** When eventually I had unpacked my smaller suitcase in my room we were then back into the main living area for the start of our Workshop/AGM, Trevor was on his laptop, Ronald was on his TI console with cf7+ and a 15"small screen LCD TV/Monitor and he had an issue with this TV/Monitor with some of the colored squares on the TI title screen of different sizes he was using a TI **modulator made especially for the European market with a European/Scart Type socket**

going into the back of the TV/Monitor, he soon had the modulator box open and doing plenty of adjustments but to no avail he even tried his second TV/Monitor which was only showing a black/white screen and slightly off centre. Trevor was doing his best to get a good Wi-Fi signal in the

TAKEN AT NIGHT IN APARTMENT

apartment but with difficulty, so had the bright idea of increasing the signal to a reasonable standard with the purchase of a booster, on his return from Loughbrough he had purchased a **BT N300 range extender which was plugged into a 3 pin wall socket** and after trying and re-trying was eventually able to increase the signal in the apartment, Berry set up his Laptop as signal was increased. Trevor had booked a table for our late dinner at the restaurant below at about 7pm they were lovely people serving and the food was exceptional and by the time dinner was over we retired to our apartment and at about 11pm our first day of the AGM was over.

SATURDAY 8.30pm After a wash and brush up we were down to the restaurant again for breakfast and then back to the apartment for the second day of our AGM at 10am where Ronald gave us a demonstration of his **BEAGLEBONE BLACK Texas Instruments Minicomputer (which**

VIEW FROM APARTMENT ACROSS MARINA

is reviewed later in TI*MES) on the resident 40 inch apartment TV even though everything did not work as it should it was still very impressive. Berry was giving out envelopes to everyone which included a **DVD + RW** from the **CHICAGO FAIRE 2015** and was quite full of useful information such as a **Cartridge Manipulator, Floppy Emulator , Chicago Software Library, Files In Linux** and much much more, when we had discussed about the disk contents I was then able to set up my TI System with our Group Digital

Projector I had brought in my suitcase it is a DLP HP vp6120 which at twelve years old shows a very reasonable 720p image we hooked this up to my TI by VGA for picture and COMPONENT for sound and after triple checking connections all went well with a very acceptable 70
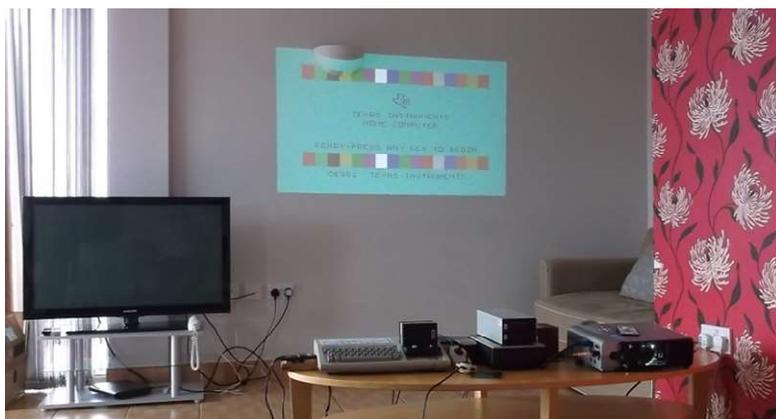
TI PROJECTED ONTO APARTMENT WALL

inch image projected onto the painted wall of our apartment , just before Lunch Francesco and Claire arrived and explained about the traffic holdups along the way, they were staying in a Hotel about 2km towards Loughbrough, and were here till Monday afternoon, by now it was Lunch time and after a bowl of superb soup a drink and discussions we were back in the apartment at 2.30pm ready for more time with our favorite machine and more demos, but first we had our Annual General Meeting.

At 2.40pm Trevor opened the meeting and the Proposed Agenda was to carry on another year in our same positions as Texas Instruments User Group United Kingdom

Trevor Stevens	as	**TIUGroupUK**	**Chairman**
Francesco Lama	as	**TIUGroupUK**	**Media Librarian**
David Caine	as	**TIUGroupUK**	**Editor /Membership**
Berry Harmsen	as	**TIUGroupUK**	**Contributing Editor**
Richard Twyning	as	**TIUGroupUK**	**Treasurer/Secretary**

 All was seconded by the other individuals present

It was also proposed that as Richard was not here that we let it be known that if he wants to be available in 2017 for Treasurer/Secretary he must be in a position to carry this said post out at all times within reason.

Trevor said he would send text of the minutes to the Editor and produce an article for our Magazine, he also proposed to update the TIUGUK website making it easier for visitors and members alike, also to approach Richard about his group position.

Francesco said his Disk Library organizing was nearly finished and would send details of its finish before June for publication in our Magazine, and also send an article for publication.

Berry said he would send translated articles from Dutch for magazine and get a final update from Jens for the European TREFF

in October   and send details of Workshop in Birkenau second weekend in April.

   David said that even though our Pay Pal balance looked quite healthy compared to twelve months ago, most of the income was from Trevors TI Sale Items and we would have to try and make sure we all pay our Annual Membership fees.

   Trevor said as there was nothing else to discuss officially he would close the 2016 AGM meeting at 4.19pm.

 With the ending of the meeting Trevor was next for a demonstration and so his laptop was connected to the VGA of the projector to get him started with his ---- WORDPRESS project ----- this package is vast but very simple. It is called WordPress, as demonstrated it

LUNCH ON SECOND DAY

is a crm that allows you to edit a website live from an admin area, it was showing you how to do an edit and make a new page, then put it into a menu, it also showed the editor which was ckeditor.- WordPress started in 2003 with a single bit of code to enhance the typography of everyday writing and with fewer users than you can count on your fingers and toes. Since then it has grown to be the

MY PORTABLE SETUP THROUGH PROJECTOR BY VGA CONNECTION

largest self-hosted blogging tool in the world, used on millions of sites and seen by tens of millions of people every day, you download and install yourself.   It started out as just a blogging system, but has evolved to be used as full content management system and so much more through the thousands of plug-in and widgets and themes, and limited only by your imagination. (And tech chops.)   WordPress was born out of a desire for an

elegant, well-architectured personal publishing system built on

NEW MODULES THAT BERRY BROUGHT ALONG

PHP and **MySQL** and licensed under the **GPLv2** (or later). It is the official successor of **b2/cafelog** and is fresh software, but its roots and development go back to 2001. After Trevors demonstration it

was time to get ready for Dinner again so after a wash and brush up it was down to the restaurant at 8pm to enjoy a well cooked meal and drink and good company as all seven of us were there, Myself, Berry, Ronald, Trevor and Sue, Francesco and Claire, we were back to the apartment at 10pm for more with the TI and an hour of putting the world to rights then when Ronald, Francesco and Clair went back to their Hotels and Trevor and Sue retired to their boat , Berry and I decided to call it a day and retire to our respective rooms bringing the second day to a close.

<mark>SUNDAY 8.30AM</mark>   **The start of our last day for the AGM** and

RESTAURANT VIEW from APARTMENT ABOVE

with the apartment booked for Berry and Myself until Monday Morning we were able to leave our computers hooked up till this evening, so after a wash and brush up we were back down to the restaurant for another excellent

breakfast   then back into the apartment at 10am for more discussions and playing with the TI through the projector and went through a few **NEW MODULES** that Berry had brought along mainly the game sets of Rasmus Moustgard such as Titanium, Road Hunter , TI Scramble and also a Development Module with a modified board inside which is used as a demonstration of a **VERY HIGH RESOLUTION VIDEO** ---- it is very pixelated but does work with multiple colours trying to come through also speech-----no

doubt a mind-blowing amount of memory being used up. Also a few games from my single sided single density 3 ½" disk games such

THE HUNTING LODGE /BARROW/upon/soar

as Freddy and Par-4-Golf.

It was now time for Ronald to leave so as to catch his Cruse back home to Netherlands, after saying our goodbyes Lunch time was calling again so we all went down to the restaurant for another excellent meal and then about 3pm we were all invited onto Trevor and Sue's house boat, it is not for the faint hearted as to get to it you have to walk into the centre of the Marina on a floating walkway but once inside very cosy almost everything you need to live from day to day, At about 5pm it was back to the apartment for more TI playing and discussions and I ordered a Taxi for morning at 11am to get us to Barrow-Upon-Soar Railway Station, then about 6pm it was time to get ready for our last night out together and Trevor had booked a table for six at 8.30pm at THE HUNTING LODGE in the picturesque

BARROW UPON SOAR RAILWAY STATION

Town of Barrow-Upon-Soar, we arrived by car, I was in with Francesco and Claire and Berry was in with Trevor and Sue, which took about five minutes, upon arrival it is quite a large and imposing building and recently refurbished we were directed through the very long bar area and into a much larger room with about a dozen tables each seating eight people, we had a very nice meal and drinks at reasonable prices then about 11pm we headed back to the Marina, and another fruitful Day was over. MONDAY 8.30am after a wash and brush up Berry and I were down again for our excellent Breakfast then back into our apartment for packing our suitcases and getting ready for our Taxi which turned up dead on time, excellent service, we said our goodbyes to Trevor and Sue and thanked them both for their excellent organisation and picking of a most wonderfull place to stay and visit, and so ended our 2016 Workshop and AGM.

AGM Minutes for April 2016

AGM Meeting started 2.40pm April 1ˢᵗ.2016 ----------------------

Introductions to those in attendance were

Ronald Kalwij   Dutch User Group ----------------------------**David Caine**
Berry Harmsen   Dutch User Group ----**Francesco Lama Claire Lama**
Trevor Stevens and Susan Stevens--
Absentees Richard Twyning---

(1) Thanks were made to David for his production of the TI*MES magazines throughout the year and his organisation of the Treff 2015 at Crewe.

(2)Regarding the TI*MES magazine, David said he required articles for the June issue, which needed to be in by the first week in June 2016-----

(3) We voted to keep **production and distribution of TI*MES** in **PDF** format and by **E-MAIL**.---------

(4) We voted to keep **our GROUP MEMBERSHIP FEE** at **£9 per year.—**

(5)The disk library is now in print to all members who subscribe to our group through **TI*MES**------Francesco said that it will be ready for the Summer edition of our Magazine.

(6) We as a Group will be sending a request to Richard Twyning for a full list of accounts**. New EU legislation stating that all private Group funds must be verified so as not to attract tax, and displayed publically to all group members is now in force from Jan 2016**, so this must be done as soon as possible. An email will be sent to Richard to expedite this action. **Likewise our Pay Pal** and **Disk/Module Library Account** are affected by this also.

(7) The voting for the 2016---- **positions for our UK group were made**
Chairman ---**Trevor Stevens**
Treasurer---------------------**Richard Twyning**   proposed by David Caine
Disk Librarian --**Francesco Lama**
Editor & Membership ---**David Caine**
Reporter from the Netherlands ----------------------------**Berry Harmsen**
Berry travels widely in the TI community and brings news and views of what is going on in other TI Groups around the world.

(8) The new awards from USA were discussed and it was agreed to email Tom Wills regarding our Group being awarded **JIM PETERSON LIFETIME ACHIEVEMENT AWARD, in Community Service**. David will organise this when we have the award confirmed.

(9)A new website is being planned for the future which will be based on the **CRM WordPress Program. A demonstration** of how authorised people can update a website with Word Press was given later in the day.

                        After a general discussion also regarding the basic points outlined above the meeting was closed at 4.19pm.

FROM The CHAIRMANS CHAIR…

The AGM was an absolute cracker, we hired a Penthouse suite at Pillings lock, which came with some member's accommodation. The Penthouse overlooks the Mariana and is very light and airy. All who attended (see the minutes in this issue) agreed it was a very nice place with good communication and access. Below we even had a restaurant. We may be having it there again next year, depending on the price.

Well it has been some time since I laid hands on my TI, it normally fires up straight away. However looks like I have a bad power supply. Then it came to the realisation that this computer, a TI99/4a was bought by me in late 1981 from ASDA (part of the Walmart Group) here in Lincoln UK, and now nearly 35 years old… What other machine was built to last so long. Then I thought well there was an early TI, so I have searched for an article to relate to this earlier version of this bomb proof machine. Here it is thanks to **Tom Wills** and his website, plus the contributors in the text.

The TI-99/4

Many thanks to **Bryan Roppolo** for providing both photo and some information.

The TI-99/4 was Texas Instrument's first attempt into the home computer market. This computer was originally equipped with a Zenith monitor and sold for a little over $1000 which was pretty expensive for a computer in 1979.   **The TI-99/4 had an entirely different keyboard than the 99/4A**. **There were a total of 41 keys** which includes the orange Shift and Enter keys and there was even an extra Space key next to the "A". Now get this, above the number 6 on the 99/4, there is a comma character, but on a 99/4A and modern computers there is a carrot. However, the 99/4's keys were not the normal "typewriter"-like keys found on the 99/4A, they are almost identical to the modern TI calculators. The first time I used a TI-92 I **noticed how similar the keys were in shape compared to the 99/4 and they even had the little dips in the centre.**

The problem with the TI-99/4 **is that there was no Function key to access the Redo command, Reset command, etc**. Instead, the 99/4 used the Shift key to access these special functions. For example, you would hit "Shift-C" to break out of a program or "Shift-Q" to restart the computer. I can remember one time that I accidently hit "Shift-Q" in a

BASIC program I was writing thinking that it would capitalize the letter "Q" but instead it restarted the computer making me very angry since I would normally type for 2 hours a day and all that work would be gone! But now I am very careful, I always save my work after typing in 100 or

so lines just so it doesn't happen again. Maybe the TI-99/4 taught me a lesson on saving work that I might not have learned to this day if it wasn't for that machine.

If you are wondering how I memorized that "Shift-Q" means to restart the computer or "Shift-C" breaks a program, it is not by the mistakes I made (May have helped) **but by the black thin sheets that would cover the entire keyboard and let you know the special functions**. There were also game overlays that would tell you which keys to push to move a character around or if you are player 1 or 2.

The 99/4 yet had another drawback. It could ONLY write in UPPER case letters! But when the 99/4A came out, TI expanded the ASCII character set to include UPPER and lower case letters along with the { } ~ and ^ characters. There was a little program that I made on the 99/4A in BASIC that went like this:

100 Print "THIS IS THE 99/4a SPEAKING"

200 Run

I made sure that all of the text was in CAPS except for the "a" at the end of "99/4a". I then saved it and ran it on the 99/4, since the /4 could only read UPPER case letters it said "This is the 99/4 speaking" leaving the "a" out. But this must first be done on a 99/4A so you can put a lower case "a" in the message. This is just a little neat way of knowing if your computer is a 99/4 or 99/4A without looking at the case.

As we know, the 99/4A only has 2 options with a cartridge plugged in. But on a 99/4, there are 3 options, this is because there was an **Equation Calculator built into the 99/4 that could do all of your calculating needs**. In this program, not only could you do calculations, but by pressing "Shift-E" you could store a number or problem in memory for later use. The Equation Calculator might be the reason why the TI-99/4's ROM is 5 Kbytes larger than a 99/4A   Now for the most important difference.
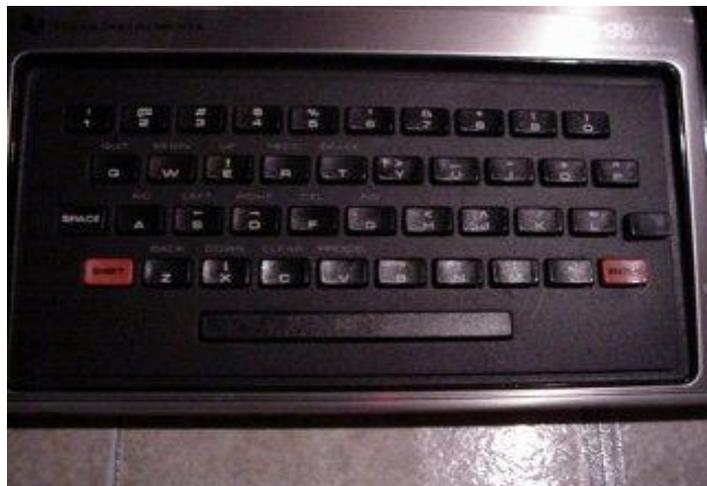
The TI-99/4 had the same CPU as the 99/4A (TMS9900 while running at 3.3MHz) but they had different graphic chips. The 99/4 used the TMS9918 graphics chip and the 99/4A used the **TMS9918A (This might be the reason they called it the 99/4A**). You might think that by using a 99/4A you could get better graphic capabilities in BASIC. But that is not necessarily true since you could not use the additional display mode (A) in BASIC. I have continuously tried to get Parsec working on my 99/4 (works on my 99/4A) but have had no luck. The reason for this might be that Parsec took advantage of the TMS9918A capabilities making it not playable on a TMS9918 machine. When the TI-99/4 came out, it was **supplied with an 1/8" mono earphone jack** which could be found on the bottom left side of the console. When you plug in any type of earphones you can get the sound directly from the machine instead of from speakers

 (**The earphone jack also appeared on the Apple II computers**). But you should always be careful, once I plugged in my earphones and the computer gave off an ear-piercing sound when I turned it on that rattled my head for a day.   There might even be another version of the 99/4 where there is a speaker built into the case under the cartridge port!

The 99/4 uses a different power supply than a 99/4A. Usually, the /4 power supply has a large silver TI logo stamped on the top (not engraved like on a /4A). the bottom of the power supply should say this:

TEXAS-INSTRUMENTS
ADAPTER
MODEL AC9500
NOMINAL   OUTPUT
INPUT PINS 1,2
120VAC 16.0VAC
36.0VA
60HZ
PINS 2,4
8.0VAC
1.0VA

I am telling you the differences because if you use a 99/4 power supply on a /4A, you might damage the machine.

You may think that the cartridge ports are the same on both machines, well that isn't true. **The 99/4's cartridge port is 1/4 inch closer to the** opening than on a /4A. This really shouldn't matter unless you have a cartridge titled "**Preschool Early Learning Fun**" (which is totally different than Early Learning Fun) that was made specifically for the 99/4 and if inserted into a 99/4A will not make contact, therefore you will not be able to play the game!====(**this photo from Obsolete Technology Website**)

Other facts from a 1979 issue of Mechanix Illustrated Magazine: **The price of the 99/4 in 1980 was $1150** ALSO Milton Bradley teams up with TI to make Yahtzee, Connect Four, and Zero Zap for the 99/4 as their first Home Computer games (Excluding Microvision since it was not a Home Computer). And the original 99/4 Speech Synthesizer listed for $150. Thanks to **Jim Fetzner** for information regarding the cartridge port

Ti994a MODULE COMPATABILITY -as- of March 2014

MODULE NAME	PHM	DATE	DISK	TAPE	PIO	RS232
TAX INVESTMENT and RECORD KEEPING	3016	ANY DATE	DISK 1,2&3	NO	NO	THERMAL & SERIAL
PERSONAL RECORD KEEPING	3013	NO 1979-1999	DISK 1,2&3	YES 1 & 2	YES PIO	THERMAL also
PERSONAL REPORT GENERATOR	3044	#	DISK 1,2&3	YES 1 only	YES PIO	THERMAL also
STATISTICS	3014	NO 1979-1999	DISK 1,2&3	YES 1 & 2	NO	THERMAL & SERIAL
PERSONAL REAL ESTATE	3022	#	DISK 1,2&3	YES 1 only	YES PIO	THERMAL & SERIAL
SECURITIES ANALYSIS	3012	ANY DATE	NO	NO	NO	THERMAL & SERIAL
VIDEO CHESS ☻	3008	#	NO ☻	YES 1 only	NO ☻	NO
MUSIC MAKER ♫	3020	ANY DATE	DISK 1, 2&3	YES 1 & 2	NO	THERMAL ONLY
WEIGHT CONTROL And NUTRITION	3021	NO 1980 – 1998	DISK 1,2&3	YES 1 only	NO	THERMAL ONLY
HOUSEHOLD BUDGET ☻ MANAGEMENT	3007	ANY DATE	NO ☻	YES 1 & 2	NO ☻	THERMAL ONLY

The only way to change these modules for DATE and for PIO parallel printing is to use a Myarc GENEVE 9640 or a Millers Graphics GRAM CRACKER which is a piece of Hardware that fits into the TI994a Module port and both of these Hardware pieces were sold in the late 1980s.

☻ VIDEO CHESS to access DISK, PIO PARALLEL PRINTER and JOYSTICKS. With Third Party Software Control With BEYOND VIDEO CHESS package ===== Asgard Software @1987 Harry Wilhelm

☻ HOUSEHOLD BUDGET MANAGEMENT to access DISK and PIO PARALLEL PRINTER With Third Party Software Control HOME BUDGET PRINTOUT software package Supplied Originally By ===== Buehrer Hahn Software @1985 Bob Lawson-Houston-Texas USA =====

SWITCHABLE *FLOPPY DISK* DRIVES ---------- May 2014

THE 40 – 80 TRACK THEORY Before we begin to explain about the switchable floppy disk DRIVE we must first take a look at the floppy DISK and its terminology. By knowing the number of tracks on a Disk and how many sectors per track there are we can calculate the storage capacity on each side of a disk and hence the total capacity of a disk e.g. In a single density there are 9 sectors per track with 256 bytes per sector a total track storage space of 2,304 bytes, with 40 individual tracks the storage area on one side of the disk would be 92,160 bytes and for an 80 track disk 185,320 bytes. If you have double sided drives the respective side capacity is doubled. For ease a disk drives capacity is quoted to the nearest 90 kilo bytes e.g. A 40 track single sided drive stores 90k and 80 track single sided drive stores 180k and so on.
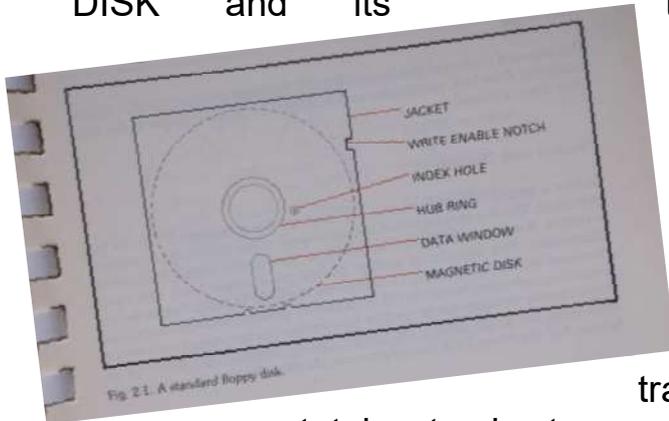
Fig. 2.1 A standard floppy disk.
JACKET
WRITE ENABLE NOTCH
INDEX HOLE
HUB RING
DATA WINDOW
MAGNETIC DISK

FORMAT AND DENSITY. Before a brand new diskette can be used by the computer it has to be formatted. This is a process which segments each of the tracks into a number of sectors. A sector is likened to a box which is capable of holding 256 bytes of information. The amount of sectors placed on a single track can vary. However, 10 sectors are the limit. The TI994a, ATARI, and BBC micro's use a formatting technique known as FM or frequency modulation better known as single density. A maximum of ten 256 byte sectors can be created on a single track using the single density FM format. Double density is another type of format which uses modified frequency modulation or MFM. This has the effect of doubling the bit density on the disk and so allowing a twofold increase in the number of sectors per track. Double density should in no way be confused with the number of tracks. Technically it is a method used when formatting, either FM for single density or MFM for double density.
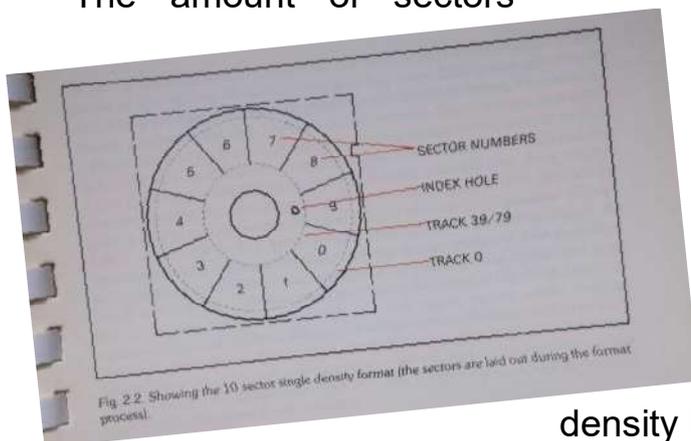
Fig. 2.2. Showing the 10 sector single density format (the sectors are laid out during the format process).
SECTOR NUMBERS
INDEX HOLE
TRACK 39/79
TRACK 0

.

INDEX HOLE

This is the small hole in the jacket of the disk which when optically aligned with a further hole in the disk itself will produce a short pulse, this is referred to as the soft sector index and used by the computer to time a single revolution of the disk.

DATA WINDOW.

This is an elongated hole in the disk jacket which allows the read write head to make contact with the disk. The window appears on both sides of the disk as 40 or 80 track drives can have double heads for recording on both sides of the disk.

WRITE ENABLE NOTCH.

This small notch on one side of the disk (on both sides of a 994a flippy 5 ¼" disk only) is used to enable the disk drives writing electronics, covering it with a small opaque write protect tab will prevent the disk drive from writing data to the disk. Useful for preventing accidental erasure of valuable programs and utilities.

HUB RING.

This exposed portion of disk is mechanically clamped in the disk drives clutch and drive hub, which spins at 300 RPM (Revolutions per Minute). The clutch engages as the disk drive door is closed.

Fig. 4.2. Inserting a 5¼ inch Disk into the drive

SWITCHABLE FLOPPY DRIVES.

The switchable disk drive is a machine that is capable of reading disks created on either a 40 Track drive or an 80 Track drive. **THIS** drive is in essence an 80 track disk drive with some clever electronics Incorporated that allow the user to choose the track pitch he desires. This choice is made by the setting of a switch easily found on the unit. The 40 Track drive has a pitch of 48 TPI and the 80 Track drive has a pitch of 96TPI (*Tracks Per Inch*).

When the computer sends a step pulse the drive head moves one track, either in towards the centre of the disk or out away from the centre. It would normally take 80 step pulses to move the drive head across the complete range of tracks. However, when the drive is set in the 40 track mode the electronic device adds a second pulse to every one received from the computer. The computer only needs to Issue 40 pulses to move the head all
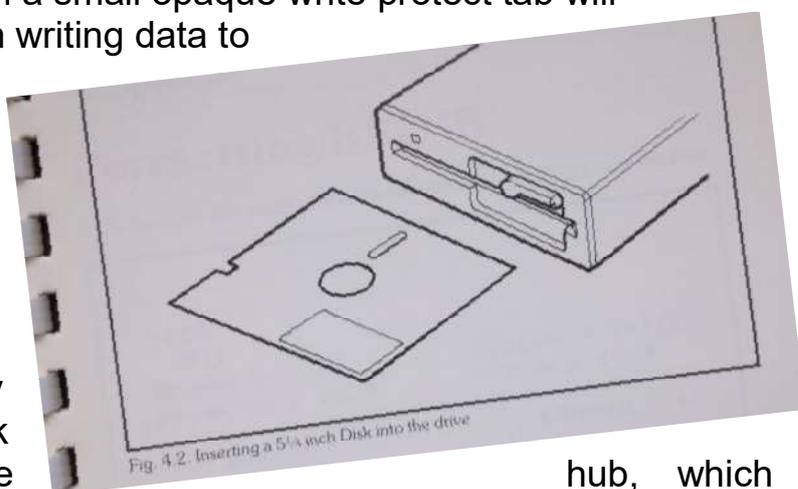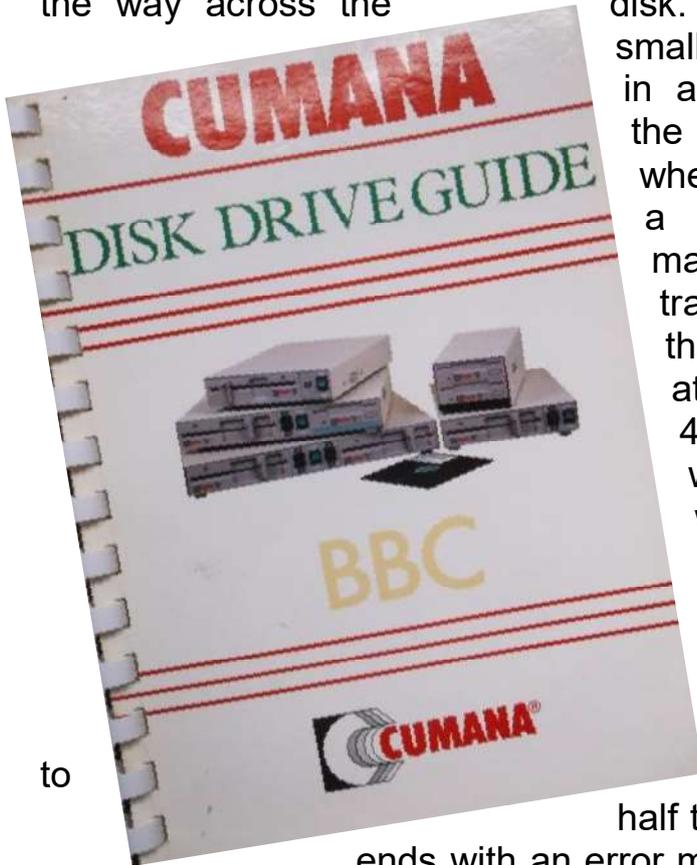
the way across the disk. This does however present a small problem The width of the head in an 80 track drive is smaller than the head in a 40 track drive, so when the switchable drive reads a track created on a 40 track machine it only reads half the full track width.This it does with ease the problem occurs when you attempt to write to a disk in the 40 track mode since the head width is smaller, data is only written to half of the correct track width.   The switchable drive will read this data without fail. However, if the disk were to be placed in a real 40 track drive the drive would attempt to read half the old data plus half the new data.   Ultimately this ends with an error message typically DISK ERROR AT XX/YY which means data not found at the indicated track and sector. See fig.1 for a clearer understanding. The only suggestion I can make for users wishing to write 40 tracks on such a drive as this.

(a)   The disk used is brand new or previously used disk that has been bulk erased.

(b)   The disk is formatted on a switchable drive set in the 40 track mode.

If these simple steps are adhered to there should be no problem, remember as soon as the written to in a 40 track will be

Fig. 13.1 Showing the overlap from 40 track to 80 track drive.

disk is track drive the width of the increased and so rewriting again with a switchable drive can cause a problem

The Golden Rule is this: - When exchanging disks with friends or colleagues remind them to make a BACK UP copy,   then any modifications they make can be made on the copied disk without the fear of read write errors

If you abide by the same principle then the rule will Work both ways.

NOTE: If a disk becomes corrupt, copy the files that are readable and then reformat the disk. If you always keep a backup you will be one step ahead of the accident.

As you can see, in the (new data) diagram above, If an 80 track head writes to an original 40 track disk, Old Data' is written over by 'New Data' in half the track width, leaving data that will be read by a switchable drive but not by the original 40 track machine.
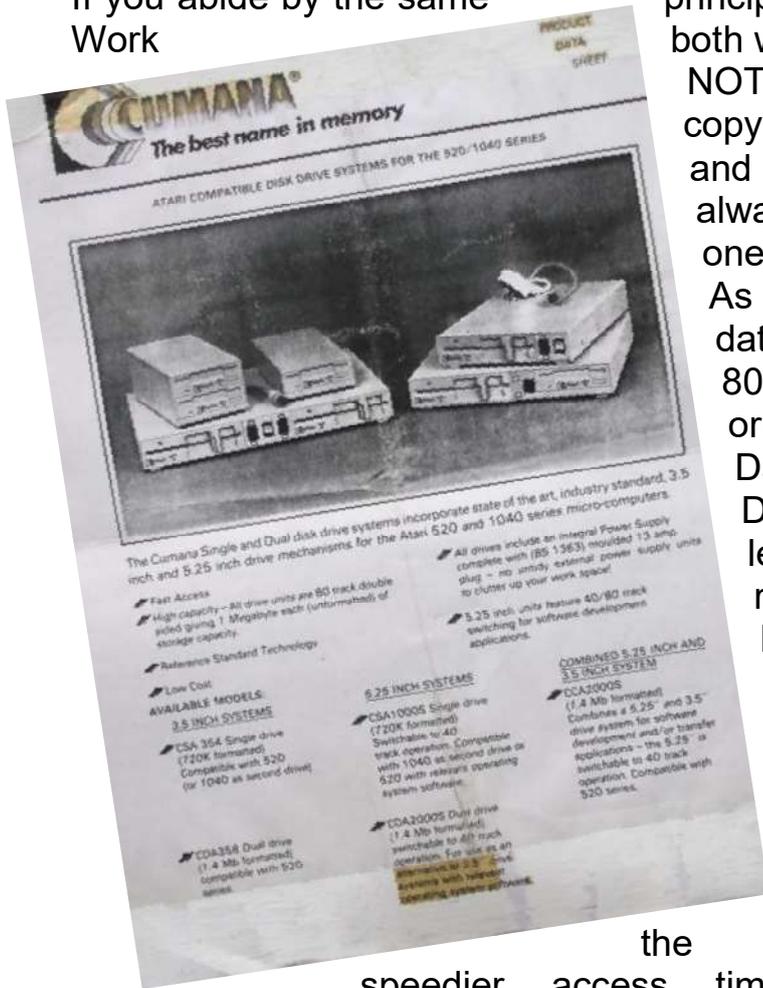
3½" FLOPPY DISK DRIVES

With 3 ½" inch floppy drives the number of tracks per inch has increased. This is the reason for the quieter performance and speedier access times. Track pitch for a 40 track drive is 67.5 TPI; track pitch for the 80 track drive is again double at 135 TPI. A switchable version of the drive is also available.

The 3 ½" inch drive is completely ti994a, BBC SA400, and ATARI bus compatible with the 5 ¼" inch drive. It can therefore take the place of existing 5 ¼" inch drives or can be added to existing 5 ¼" inch drive systems.

CONCLUSION

. **These extracts were taken from THE CUMANA DISK DRIVE GUIDE FOR THE BBC MICROCOMPUTER @ 1987 And the PRODUCT DATA SHEET for the ATARI 520 and 1040 systems. Some extracts were amended by me to include the Texas Instruments 994 and 4a Home Computers in April of 2014.**

and -- produced - with - the - help - of - Microsoft - Word -- 2007
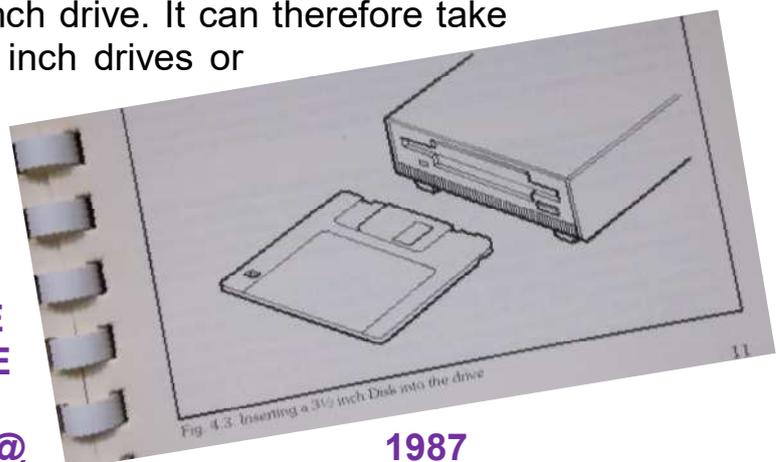
Flip Squares

Flip Square is a puzzle game in which each puzzle is called a Map. The simplest Maps consist of a square array of squares which are either red or gray. The object is to flip all of the red squares to turn them green. Gray squares cannot be flipped. They simply get in your way and make solving the puzzle harder. You begin by picking one of the red squares as your starting point. Then you move to adjacent red squares either horizontally or vertically.

Red squares in the chosen direction are flipped until you encounter a gray square, a green square or the edge of the Map. Then you move in a different direction. You will either flip all of the red squares (success) or arrive at point where there are remaining red squares but with none adjacent to your current position (fail).

Orange squares

Orange squares must be passed through twice. The first pass changes the square to a red square and the second pass changes it to green.

Purple squares

When you encounter a purple square it changes to green but also jumps you over the next square in the direction you are moving providing that you land on a square that can be flipped (red).

Consider the following: If you choose to move left the result will be
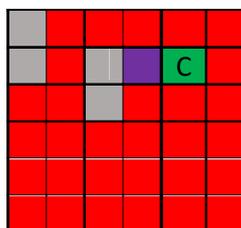
Where C is your current position

however if the situation were as follows:
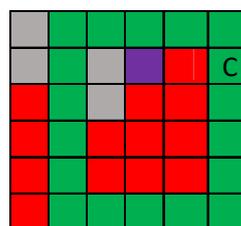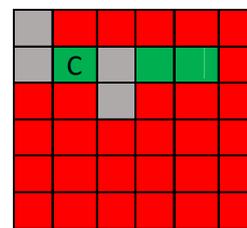
If you choose to move left the result will be
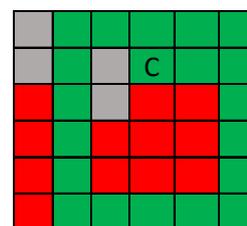
You cannot jump over the gray square because there is not a red square on the other side.

I first encountered these Flip-Square Puzzles when Norman Rokke from USA was demonstrating his Flip-Square programming skills for our TI. at our 2013 European Treffen in Eindhoven, Netherlands.

The BeagleBone Black, a new mini computer of Texas Instruments

GENERAL DESCRIPTION

Beagle Bone Black is a low-cost, open source, community-supported development platform for ARM® Cortex™-A8 processor developers and hobbyists. Boot Linux in under 10-seconds and get started on Sitara™ AM335x ARM Cortex-A8 processor development in less than 5 minutes with just a single USB cable. Beagle Bone Black ships with the Ångström Linux distribution in onboard FLASH to start evaluation and development. Many other Linux distributions and operating systems are also supported on Beagle Bone Black including Ubuntu, Android AND Fedora.

Beagle Bone Black's capabilities can be extended using plug-in boards called "capes" that can be plugged into Beagle Bone Black's two 46-pin dual-row expansion headers. Capes are available for, VGA, LCD, motor control, prototyping, battery power and other functionality. For more information visit the website of the Beagle Bone Black Support Community at:
http://beagleboard.org/Community/Forums

OVERVIEW

The Beagle Bone Black is the latest addition to the BeagleBoard.org family and like its predecessors, is designed to address the Open Source Community, early adopters, and anyone interested in a low cost ARM Cortex-A8 based processor. It has been equipped with a minimum set of features to allow the user to experience the power of the processor and is not intended as a full development platform as many of the features and interfaces supplied by the processor are not accessible from the Beagle Bone Black via onboard support of some interfaces. It is not a complete product designed to do any particular function. It is a foundation for experimentation and learning how to program

the processor and to access the peripherals by the creation of your own software and hardware.

It also offers access to many of the interfaces and allows for the use of add-on boards called capes, to add many different combinations of features. A user may also develop their own board or add their own circuitry. **Beagle Bone Black is manufactured and warranted by Circuitco LLC in Richardson Texas** for the benefit of the community and its supporters. In addition, Circuitco provides the RMA support for the Beagle Bone Black Jason Kridner of Texas Instruments handles the community promotions and is the spokesmen for BeagleBoard.org. The board is designed by Gerald Coley, an employee of Texas Instruments and a charter member of the **BeagleBoard.org community**. The PCB layout was done by Circuitco and Circuitco is the sole funder of its development and transition to production.
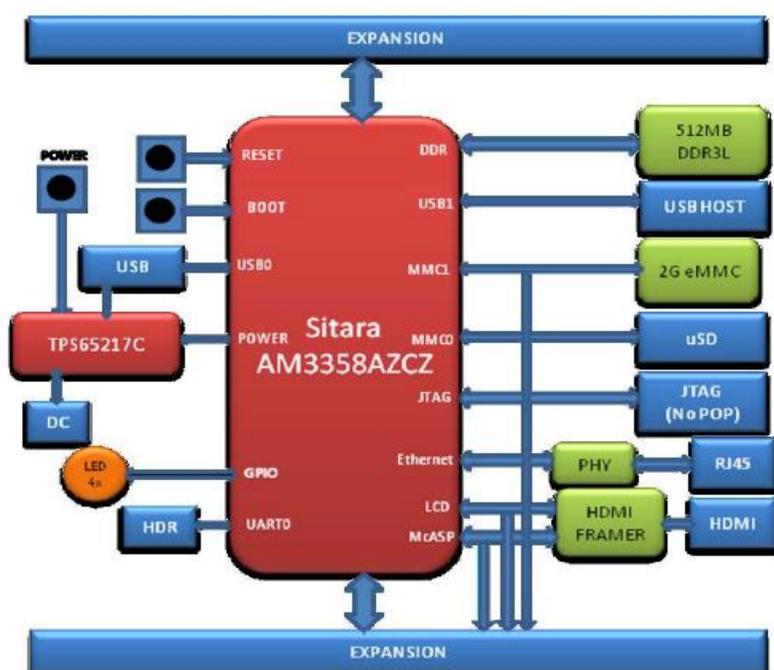
The Software is written and supported by the thousands of community members, including Jason Kridner, employees of **Texas Instruments, DigiKey, and Circuitco.** The board is intended to be compatible with the original Beagle Bone as much as possible. There are several areas where there are differences between the two designs. These differences are listed in the manual, along with the reasons for the differences.

FEATURES of the BEAGLEBONE

Example Applications;	Robotics, motor drivers, Twitter printer, data backup, SDR base station, USB data acquisition and more
Board size;	3.4" x 2.1"
DDR memory:	512 MB
Development environment:	Cloud9 IDE on Node.JS with Bone script library
Ethernet	On-chip 10/100 Ethernet
JTAG	Optional
Memory	2GB eMMC memory that's pre-loaded with Angstrom distribution and that frees up your micro SD card slot
Power Options	Via USB or 5V DC input
Processor	1GHz AM3359 Sitara ARM Cortex-A8
USB	1-port USB 2.0 Host 1-port USB 2.0 Client

The price of the Beagle Bone Black in the USA is $ 45.-. The device is in Europe for sale at Conrad Electronics for Euro 45. - (order number 409907-89).

This advert is from well over two years ago so prices and specifics will possibly have changed in that time --- I first encountered this tiny beauty at the October 2013 TREFF in Eindhoven Netherlands and later in the December 2013 issue of Tljdingen the Dutch TI User Group Magazine of which Berry Harmsen and Ronald Kalwij are part of and here Ronald is giving us a demonstration

TI.USER GROUP UK.*MEETING ---- DATES since 1984*

(1) **(First TI.Users UK Show and Faire)** November 03rd **1984**
The Ritz Hotel, Manchester, M1 5NQ. (Over 1000 Attended)

(2) **(Second TI.Users UK Show and Faire)** April 28th **1985**
The Corn Exchange. Church Street, Brighton, BN1 1UE.

The Ritz Manchester 1984 (1)

Digbeth Hall Birmingham 1985 (3)

(3) **(ThirdTI.UsersUKShow/Faire/A.G.M)** October 26th **1985**
Digbeth Civic Hall, Digbeth, Birmingham, B5 6DY.

(4) **(Fourth TI.Users UK Show and A.G.M)** May 03rd **1986**
Centenary House, North Street, Leeds, LS2 8JS.

(5) **Personal Computer Show** September 6th 7th **1986**
London Olympia, Manchester Square, London W14 8UX

(6) **S.M.G.Jamboree** November 08th **1986**
Mackie Hall, Mackie Avenue, Patcham, Brighton, BN1 8RA

Mackie Hall Brighton 1986 (6)

Northgate Arena Chester 1990 (16)

(7) **(Fifth TI.Users Show, Faire and A.G.M.** May 16th **1987**
Central Suite, Exchange Street, Derby, DE1 2DU

(8) **Faire and A.G.M** May 28th **1988**
Central Suite, Exchange Street, Derby, DE1 2DU

(9) **(First Alternative Micro Show)** **November 12th** **1988**
Aston Villa Leisure Center, B/gham. B6 7JU (Organized by EAR99er's)

(10) **(Second Alternative Micro Show)** **April 01st** **1989**
Royal Horticultural Hall, London. SW1P 2PE Organized by EAR 99er's)

The Wheatsheaf Pub Sandbach 1994/1996/1997(27/30/33)   Oldfield Primary School Maidenhead 1992 (22)

(11) **(Sixth TI. Users Show and Workshop** **April 15th** **1989**
Bloxwich, Leisure Center, Walsall , Birmingham WS3 2DA

(12) **A.G.M.** **June 17th** **1989**
Romiley Community Centre, The Precinct, Stockport, SK6 4EA

(13) **Workshop** **August 12th** **1989**
(Ken Wilfords House). Blacon, Chester.

(14) **(Third Alternative Micro Show.** **November 11th** **1989**
County Show Ground, Stafford ST18 0BD. (Organized by EAR 99er's)

The Beeches Hotel Nott's 1998/2002 (treff13/17)   Newstead Station Hotel 2000/2005/2006(36/43/45)

(15) **(The First Wrexham Workshop)** **February 24th** **1990**
Plas Madoc Leisure Centre, Acrefair, Stafford. LL14 3HL

(16) **AGM.** **May 26th** **1990**
Northgate Arena, Victoria Road, Chester, CH2 2AU

(17) **(Fourth Alternative Micro Show)** **November 10th** **1990**
Bloxwich, Leisure Center, B/ham WS3 2DA (Organized by EAR 99er's)

(18)   **Workshop**   **January 26th**   **1991**
Cuffly Hall, Maynard Place, Cuffly, Hertfordshire, EN6 4JA.

(19)   **AGM.**   **May 11th**   **1991**
Music Hall, The Square, Shrewsbury, Shropshire, SY1 1LH

Philip Neri Church Mansfield 2000/2003 (37/40)

Macclesfield Canal Centre 2001 (38)

(20)   **(The Second Wrexham Workshop)**   **June 22nd**   **1991**
Plas Madoc Leisure Center, Acrefair, Stafford. LL14 3HL

(21)   **(Fifth/Last Alternative Micro Show)**   **November 9th**   **1991**
Bingley Hall, Stafford. ST18 0BD.   **(Organized by the EAR 99er's)**

(22)   **Workshop**   **February 1st**   **1992**
Oldfield Primary School, Bray Road, Maidenhead, SL6 1UE

(23)   **A.G.M.**   **May 16th**   **1992**
St.John Ambulance Training Centre, Derby, DE1 2RE.

Festival Hall Kirkby-in-Ashfield 2008/2011 (48/51)

Best Weston Crewe Arms Hotel 2015 (Treff 30)

(24)   **(The Third Wrexham Workshop)**   **August 15th**   **1992**
Plas Madoc Leisure Center, Acrefair, Stafford. LL14 3HL

(25)   **Workshop and AGM.**   **May 29th**   **1993**
St John's Ambulance Training Center, Derby, DE1 2RE.

(26)   **A.G.M.**   **May 14rd**   **1994**
St.John Ambulance Training Centre, Derby, DE1 2RE.

(27)	Workshop	November 12th	1994

Wheatsheaf Public House, 1 Hightown, Sandbach. CW11 1AG.

(28)	Workshop	March 4th	1995

St. Johns Ambulance Training Center, Derby, DE1 2RE.

The Strathdon Hotel Nott's 2010 (Treff 25)

The Village Hall Oxford 2005/2006/2014(42/44/54)

(29)	A.G.M.	June 3rd	1995

St.John Ambulance Training Center, Derby, DE1 2RE.

(30)	Workshop	March 16th	1996

Wheatsheaf Public House, 1 Hightown, Sandbach. CW11 1AG.

(31)	A.G.M.	May 18th	1996

St. Johns Ambulance Training Center, Derby, DE1 2RE.

(32)	A.G.M.	May 10th	1997

St. Johns Ambulance Training Center, Derby, DE1 2RE.

Smeaton's Lakes Newark-On-Trent 2015 (55)

Pillings Lock Marina Quorn Leicestershire 2016 (56)

(33)	Workshop	November 29th	1997

Wheatsheaf Public House, 1 Hightown, Sandbach. CW11 1AG.

(34)	Workshop and A.G.M.	May 30th	1998

St. Johns Ambulance Training Center, Derby, DE1 2RE.

(International Treffen #13)   October 9th 10th 11th   **1998**
The Beeches Hotel and Leisure Club   *Wilford Lane*
West Bridge ford, Nottingham, UK NG2 7RN

(35)   **Workshop and A.G.M.**   **April 10th**   **1999**
St. Johns Ambulance Training Center, Derby. DE1 2RE.

Epysis Limited Newark Close Royston 2007 (46)

The Trading Post Farnesfield 2004 (41)

(36)   **A.G.M.**   **May 6th**   **2000**
Newstead Station Hotel, Newstead, Kirkby-in-Ashfield. NG15 0BZ

(37)   **Workshop**   **November 11th**   **2000**
Philip Neri Catholic Church, Mansfield, NG19 7AB

(38)   **Workshop and A.G.M.**   **April 28th**   **2001**
Macclesfield Canal Centre, Brook Street, Macclesfield. SK11 7AW

(39)   **Workshop and AGM.**   **April 27th**   **2002**
Sunrise Software, Chessington, Surrey, KT9 2NY

Sunrise Software Chessington 2002 (39)

The Music Hall Shrewsbury 1991 (19)

(International Treffen #17)   September 13th 14th 15th   **2002**
The Beeches Hotel and Leisure Club,   **Wilford Lane,**
West Bridge ford,   Nottingham UK, NG2 7RN

(40)   **Workshop and AGM.**   **July 5th**   **2003**
Philip Neri Catholic Church, Mansfield, NG19 7AB

(41) **Workshop and AGM.** **June 19**[th] **2004**
Trading Post, Farnesfield, Newark, Nottinghamshire. NG22 8HN

(42) **Workshop** **March 12**[th] **2005**
The Village Hall, Middle Road, Stanton St.John, Oxford.OX33 1HD

(43) **A.G.M.** **June 4**[th] **2005**
Newstead Station Hotel, Newstead, Kirkby-in-Ashfield. NG15 0BZ.

Bloxwich Centre Walsall 1989/1990 (11/17)

Bingley Hall Stafford 1989/1991 (14/21)

(44) **Workshop** **March 4**[th] **5**[th] **2006**
The Village Hall, Middle Road, Stanton St. John, Oxford.OX33 1HD

(45) **A.G.M.** **June 3**[rd] **2006**
Newstead Station Hotel, Newstead, Kirkby-in-Ashfield. NG15 0BZ.

(46) **Workshop** **March 3**[st] **2007**
Epysis Ltd. Newark Close, Royston, Hertfordshire. SG8 5HL

(47) **A.G.M.** **May 19**[th] **20**[th] **2007**
Sports and Leisure Center, Kingland Road, Poole, Dorset. BH15 1TN

Cuffly Hall Maynard Place Hertfordshire 1991 (18)

Aston Villa Leasure Center Birmingham 1988 (9)

(48) **Workshop and A.G.M.** **May 31**[st] **1**[st] **2008**
Festival Hall Center, Kirkby-in-Ashfield. NG17 7DJ

(49) **Workshop and A.G.M.** **June 6**[th] **2009**
(Trevors Stevens House)

(50) Workshop and A.G.M. (Trevors Stevens House)	June 5th	**2010**

(International Treffen #25) The Strathdon Hotel, Derby Road, Nottingham UK, NG1 5FT	September 24th 25th 26th	**2010**

(51) Workshop and A.G.M. Festival Hall Center, Kirkby-in-Ashfield. NG17 7DJ.	August 6th 7th	**2011**

(52) Workshop and A.G.M. (Trevors House)	June 16th	**2012**

London Royal Horticultural Hall 1989 (10)   Plas Madoc Centre Acrefair 1990/1991/1992(15/20/24)

(53) Workshop and A.G.M. The Village Hall, The Hough Village, Cobbs Lane, Crewe, CW2 5JN	August 24th 25th	**2013**

(54) Workshop and A.G.M. The Village Hall, Middle Road, Stanton St. John, Oxford.OX33 1HD	July 4th 5th 6th	**2014**

(55) Workshop and A.G.M Smeaton's Lakes, Newark-On-Trent, Nottinghamshire NG23 6ED	May 15th 16th 17th	**2015**

(International Treffen #30) Best Western Crewe Arms Hotel, Crewe Road, Crewe, Cheshire UK, CW2 6DN	October 2nd 3rd 4th	**2015**

(56) Workshop and A.G.M. Pillings Lock Marina, Quorn. Leicestershire, LE12 8FE	April 1st 2nd 3rd	**2016**

(57) Workshop and A.G.M. Details Not Yet Available	**2017**

DISK LIBRARY CATALOGUE-----May2016

VARIOUS: .... **4Front1A**, Balls_Autoblue109Blueball_Run2_Greenball_Gtext56Redball_PlanetJBM, BibleTriviaV3.01+others, BodenMiller Computer Demo, Demo1,Donations, Europe Map, Flatland5thEdnRevisedDisk1, Flatland 5thEdn. Revised Disk2, FmrayTOyuou, NotungAD8-11-90, Star Trek Spoof, Stephen, TIEmulatorV1, TIEmulatorV5.01, X, Xmas88.

4FRONT DISKAZENE: ....**Issue1** Part A Disk, and Part B Disk, **Issue2** Part A Disk, and Part B Disk, **Issue3** Part A Disk, and Part B Disk, **Issue 4** Part A Disk, and Part B Disk.

ARTICLES:.............**CARTRIDGE SERIES** by Mickey Kendrowski: Loadmaster + Cartridges 1-5, .Cartridges 6-11, Cartridges 12-13.

BEST OF 99er: .... Disk 1, Disk 2, Disk 3, Disk 4.

BOOKS (not necessarily about computing)

BIBLE (New Testament, King James): Disk 1, Disk 2, Disk 3, Disk 4.

BIBLE (Old Testament, King James): Disk 1, Disk 2, Disk 3, Disk 4, Disk 5, Disk6, Disk 7, Disk 8, Disk 9.

BOOKS (no detailed information): Volume 1, Volume 2, Volume 3.

CARD FILE ENCYCLOPEDIA.

SHERLOCK HOLMES: ……………………………………….. Holmes 1, Holmes 2, Holmes 3, Holmes 4, Holmes 5, Holmes 6, Holmes 7, Holmes 8, Holmes 9, Holmes 10, Holmes 11, Homes 12, Holmes 13, Holmes 14.

THE ADVENTURES OF TOM SAWYER: Chapters 1-10 in Disk 1, Chapters 11-20 in Disk 2.

DISK LIBRARY CATALOGUE (not up to date): Disk A, Disk B, Disk C, Disk D.

DATABASE PROGRAMS ....Cardfile V3.0 (Bill Gaskill) + Module Database for Cardfile (in one DSSD Disk or two SSSD Disks), CatCom **(Adds File Descriptor to CatLib Data)** + CatLib V15 (Marty Kroll), **Easydata V101** (Bruce Harrison), PRBase V20 (W M Warren, Disks 1 & 2), PRBase V21 (Mike Dodd, Disks 1 & 2), TIBase 01-08 + TIBase Tutor V2, Total Filer. UTILS: BASIC SORT (PRBase).

DISK MANAGERS: ………………………………C-COPY V18 (C Winter), Disk Manager 99, DM1000 V3.5 (also Source), DM1000 V3.7, DM1000 V4.0, DM1000 V5.0, M-Copier, Myarc Disk Manager 5 V1.3 DSSD. Utilities Disks, Creative Filing System Disks 1, 2, & 3, DiskUtils V4.12, DiskUtils V4.12M.

GAMES: ………………….. 4A Flyer Philips 3 (also Source), Backsteine + Various, Bible Trivia + Others, Capture-Crazy-Eau, Disney01, Disney02, DriveDemon, Entrapment-Eau, Freddy-FrogHaven, Glaxia-Gspell-Guardian-Gulper, Ghostman, HenHouse-HenPecked-Interceptor,

HighGravity+Various, HoneyHunt, JohnSeager1, JPHoddieGames1, Karate-KrazyKoala, PerfectPush, PinBall+Sams, Risk V1.02 (O Arnold), Segregation, SokoBan, Spiele1, Spiele2, SSPD1, SSPD2, SSPD3, SSPD4, SSPD5, Tetris V2.0, TI99-OPOLY V1.7, TI99-OPOLY V2.1, TitronicSvenska2, TRUEMAN, WITSeries, dskCFG. …......................

GENIAL TRAVELLER Diskazine + Programmes & Articles:
GT Vol.1 N1 Series 1, GT Vol.1 N1 Series 2, GT Vol.1 N2 Series 1, GT Vol.1 N2 Series 2, GT Vol.1 N3 Series 1, GT Vol.1 N3 Series 2, GT Vol.1 N4 Series 1, GT Vol.1 N4 Series 2, GT Vol.1 N5 Series 1, GT Vol.1 N5 Series 2, GT Vol.1 N6 Series 1, GT Vol.1 N6 Series 2, GT Vol.2 N1 Series 1, GT Vol.2 N1 Series 2.

GRAPHIC PROGRAMMING LANGUAGE: …………. GPL-Assembly, GPL Editor (Barry Boone), GPL-Manual1, GPL-Manual2, GPL-SIM_+5, RAG Software GPL Assembler, RAG Software GPL Disassembler, RAG Software GPL Manual V1, TI99/4A GROM Source, TI99/4A ROM Source.

GRAM: Gram Files (DSSD)…………………………………………………….

GRAPHICS SOFTWARE + UTILS:
Graphx, GraphxCompanionI Disk 1, GraphxCompanionI Disk 2, Graphx CompanionII Disk 1, GraphxCompanionII Disk 2, Graphx Mini Memory Version, GraphxPics, Graphx up to Tokom Needs M&B, GraphxXB, Paul2_Posters, VeryFastGraphx-XB.

JOY-PAL:
JoyPaint, JoyPaint Disk 2, JoyPaint Disk 3, JoyPaintPal2, JoyPaint V1.0.

MACFLIX: …….MacFlix1_2581_2-3-4, MacFlix2_2527-2895, MacFlix3, MacFlix4, MacFlix5, MacFlix6_2582-2581-4, MacFlix7, MacFlix8, MacFlix9_Cats, MacFlix10, MacFlix11, MacFlix12, MacFlix13, MacFlix14, MacFlix15, MacFlix16, MacFlix17, MacFlix18, MacFlix19, MacFlix20, MacFlix21, MacFlix22, MacFLix, MacFlixPro, PixProConverter&Printer.

MACPAINT: ………… KGDRAW_WESTKG, MacPaint1, MacPaint2, MacPaint3, MacPaint4, MacPaint5, MacPaint6, MacPaint7, MacPaint8.

MYART:...Ma1Kris1, Ma2Panama, Ma3, Ma4, Ma5, Ma6, Ma7, Ma8, Ma9, Ma10+Hardcopy, Ma11.

PICASSO: PicassoUtils, Picasso V1.0, Picasso V2.0, WdstkBT/Trendline2.

Pictures General: …………BluesBrothers1, Mandel200m, MandelData, Yapp+Myart…………………………………………………………………

Pictures_GIF: ……. Gifs1.

TIARTIST: …………………………………... BordersFrom01_Fto40_F, Companion1Extensions, Companion2Extensions, Companion3Extensions, Companion4Extensions Disk1of3, Comapanion4ExtensionsDisk2of3, Companion4ExtensionsDisk3of3, Companion5ExtensionsDisk1of2, Cpmanion5ExtensionsDisk2of2, Companion 6ExtensionsDisk1of2, Companion6ExtensionsDisk2of2, Companion8TICOM82,

Companion9TICOM92, Companion11Extensions, DaveRose_Companion 1 _TICOM1_Chrsets, DaveRose_Companion1_TICOM2, DaveRose_ Companion1 _TICOM3, DaveRose_Companion1_TICOM4_Instances5, DaveRose_Companion1_TICOM4_Instances, DaveRose_Companion1 TICOM5_Instances, DaveRose_Companion2_TICOM21, DaveRose_ Companion2_TICOM22, DaveRose_Companion3_TICOM31, DaveRose_ Companion3_TICOM32, DaveRose_Companion6_TICOM62, DaveRose_ Companion7_TICOM71+Artcon2+, DaveRose_Companion7_TICOM72, DaveRose_Companion13_TICOM131, DaveRose_Companion13_ TICOM132, DaveRose_TICOM61, DaveRose_TICOM62, GPics_FD, Instances_SS-1, Instances_SS-2, Instances_SS-3, Instances_SS-4, Instances_SS-5, Instances_SS-6, Instances_SS-7, Instances_SS-8, Instances_SS-9, Instances_SS-10, Instances_SS-11, Instances_SS-12, Instances_SS-13, TIArtist V2.1, TIArtist V2.01G, TIArtist V2.01Gagain, UTILS: ArtConverter V2.0, CartoonKit_Bits, Cataloger1OnDisk2, Cataloger, CH_Fonts1, CH_Fonts2, CH_Fonts3, CH_Fonts4, CH_Fonts5, CH_Fonts6, CH_Fonts7, ComicShow1, ComicShow2, ComicShow40, CSGCatalog+Instruct, CSGD1, CSGD2, CSGD3, CSGD_Fonts, CSGD-GR_Arc, CSGD-GR_Disk1, CSGD-GR_Disk2, CSGD-GR_Disk3, CSGD Instructions, DMaster, Extras-1&2 (DSSD), FontWriter V1, GifMania, PictureIt, PictureItFonts2, PictureItFontsA, PrintShop Borders Fonts Instances, PrintShopSignMaker, Signs1, Signs2, Signs3, TassSlideShow.

TIARTIST_PLUS: .... FontDesigner V1.1 (John Seager), TIArtistPlus, TIArtistPlus+Fonts+Print, TIArtistPlus+Instances, TIArtist Plus V1.03 Disk 1, TIArtistPlus V1.03 Disk2, TIArtistPlus V1.03 Disk 3.

TIPS_MANIPULATORS: ……………………………………
TIPS_0AZ_266S, TIPS_1AZ_244S, TIPS_02AZ, TIPS_12AZ, TIPS_15AZ, TIPS_21AZ_287S, TIPS_25AZ_287S, TIPS_32AZ_287S, TIPS_42AZ_ 287S, TIPS_45AZ_287S, TIPS_46AZ_287S, TIPS_48AZ, TIPS_C1AZ, TIPS_C2AZ, TIPS_C3AZ, TIPS_C4AZ, TIPS_C5AZ, TIPS_C6AZ, TIPS_FN11, TIPS_FN22, TIPS_FN33, TIPS_FT14_295S, TIPS_GAAZ, TIPS_ GMAZ, TIPS_GPAZ+GTAZ, TIPS_GRAB, TIPS_GRBC, TIPS_ GRCC, TIPS_GRCD, TIPS_GRDF, TIPS_GRFG, TIPS_GRGH, TIPS_GRHL, TIPS_GRLM, TIPS_GRMO_357S, TIPS_GROP_357S, TIPS_GRPR_357S, TIPS_GRRS_357S, TIPS_GRSS_357S, TIPS_GRST_ 357S, TIPS_GRTW_357S, TIPS_GRWZ+GWAZ, TIPS_H1AZ, TIPS_ H2AZ, TIPS_PGAZ, TIPS_X0AZ_357S, TIPS_X2AZ_321S, TIPS_X3AZ_ 276S, TIPS_X4AZ_327S, TIPS_X6AZ_317S, TIPS_X7AZ_327S, TIPS_ X8AZ_248S, TIPS_X9AZ_338S, TIPS_Y0AZ_335S, TIPS_Y1AZ_309S, TIPS_Y2AZ_200S, TIPS_Y4AZ_225S, TIPS_Y5AZ_343S, TIPS_Y6AZ, TIPS_Z1AZ_295S, TIPS_Z2AZ_234S, TIPS_Z5AZ_351S, TIPS_Z9AZ_338S_ Sector58ERR, ... TIPSMANIPULATOR V1.8, TIPS MANIPULATOR V2.10, TIPS_USGROP325A.

VARIOUS OTHERS:................. 3Dworld, ADV HALF BIT MAP Bruce Harrison. Artcon2D-Shaws!1, Balls, BITMAPMODSBruceH, CircuitDrawing, DrawABitII, ExtendedBusinessGraphics, FontWriterII, FontWriter V2, GraphicsLabelMaker, Graphics-TIBasic, Graphics-XB, GR-SpecialRamblesDec89, JP_Graphics V3.01, JP_Graphics V3.01 Docs., MacWallet, MaxRLEdsks1-2_LoadsAllOtherRLEFiles, MaxRLEdsks3-4, MaxRLEdsks5-6, MaxRLEdsks7-8, MaxRLEdsks9-10, MaxRLEdsks11-12, MaxRLEdsks13-20, MaxRLEdsks24-25, MaxRLEdsks27-28, MaxRLEdsks29-30, MaxRleTIRunnerDskA-B, MaxRleTIRunnerDskC-D, Mechatronic TIMouse, MouseArtist V2.1, mousedisk, NEWDRAW+ Source, Paul1_DL99 V2, PixPro, PLOTTER, PostersTimes!A, Quality99 Software._ RamblesOct88, SlideShowEUbruceh, SmArtCopy, TheDrawingMaster V1.3, Video Titler Bruce Harrison.

MICRODEX_INDEXES_Of_Publications (UseSCOPEinTIBase)
MICROdex1 (99erMag), MICROdex1a (Micropendium1984-88_A-L), MICROdex1a (Micropendium1984-88_M-Z), MICROdex2 (Miscellaneous Publications_M-L), MICROdex2 (Miscellaneous Publications_M-Z).

MICROPENDIUM: .... Index84-end92 (DSSD), Odd1.

MISCELLANEOUS: ....9Nudes, Atlanta99UG, AudioCalculator, B13, B14, BBS1_I_Vol1, BBS2_I_Vol2, BBS3_I_Vol3, BBS4_I_Vol4, BBS5_ MiscPgms, BBS6_Source8_84, BBS7_BBS, BBS8_I_Vol11, BBS9_I_Vol15, BillGaskillVarious1, CHDOC+SPCH+CH, DHNew, Disk1154, DiskOf Dynosaurs, Econ2-DC-Caine, G7-8, GAP, George, H2-5-6, H3-4, H7-8, H+W+YCH+Demo, HCH+Demo, LCH+Demo, Life, MeetingDortig1989, MerleVogtLoadersDocs, NCH+Demo, OhMyGod, OldStuff, PB_SS_05, PB_SS_06, Porn-1, Porn-2, Porn-3, Porn-4, Porn-5, Porn-6, Porn-7, Porn-8, Porn-9, Porn-10, Porn-11, Porn-12, Porn-13, Porn-14, Porn-15, Porn-16, QuickRun, SomeMyarcXBolny, TIInventory, TinyGrams, USConstitution Reader, VCH+Demo, XB-AssemblyHybridProgs-MerleVogt, X-Rated-1A, X-Rated-1B, X-Rated-3A, X-Rated-3B, X-Rated-4A, X-Rated-4B.

ADVENTURE Module DISKS: .... ADVENTURE: ADTEXT1, ADTEXT2, ADTEXT3, ADVENTUREhintBOOKsa, ADVENTURES1, ADVENTURES2, ADVENTURES3, ADVENTURES4, ADVENTURES5, and ReturnToPirateIsle.

GRAMKRAKER Modules: ……........… MODS_A-CH, MODS_CO-E.

MANUALS: ……………………………………...……… Physical Fitness.

MINI MEMORY: Minibase2, MM-PTI-PG1-MerleVogt, MM-TIW-EA

MULTIPLAN: ……MultiplanRevised, RAGSoftwareMultiplanV4.00 GramVersion, RAGSoftwareMultiplanV4.003, SilkConversion.

GAMES MODULES On Disk: …4Aflyer-DemonDest Fathom FootB, Alpiner-BJPoker-Breakout-Breakthrough-Buzzard, Ambul-Barrage-BuckRG-BurgerT, Arcturus-Argo-Arthrop-Asteroids-Eau, Astrofile-BigFoot-Breakout-BurgerBuilder, Backsteine-Enlarger-HoneyHunt,

BadWalls-Boxers-Eau, Barrage-BeyParsec-Blackhole-Breakthrough-Centipede-Eau, Canonball-Compucar-Connect4, CarWars-Centipede-Cerberus-Chisholm-Cubit, Defender-DonkeyK-Espial-Facechase-Fish, Dstation-Defender-Dutchsnake-Fireball-Freddy-Frogger, Eau-Karate-MoonFight-Mummy-Musik, Eau-Level-TIRunner-Topper-Typo2, Eau-MunchMan, Eau-OhMummy-Panic-PingPong-PrincessF,-Eau-Tafara-Trapper, Georges1, EtatSea, Georges-2, Gspell-HideandSeek-Wumpus-Invaders-Jumpy, HopScotch, KillerCat-Meteor-Mission-Moonswpr-Mouse, Kluu-Mancala-MrPacman, Lasso-Macropede-MathCatch-MsPacman-MunchM, Mash-Mason-Masterm-Microsurgeon-Moonmine, MineSweeper, Modules1, ModUtil, MouseAttack, MunchMobile, MusicMaker, OddMod1, OddMod2, OddMod3, OddMod4, OhMummy-Parsec-PicnicP-Rabbit-Rack, OldModules, Othello-PicnicP-Pinball-Protector-Race, Pacman-Paddle-Pizza-Pole-Popeye-Qbert, Sbandit-Sewermania-Stargazer, Scrabble-Soccer-Spotshot-Superfly, Shamus-Sneggit-Startrap-Startrek-Story-Sub, TunnelsOfDoom2, USGROP323B, VideoChess2, VideoChess, XBMod1, XBMod2, XBMod3, XBMod4, XBMod5, XBMod6.

EDUCATIONAL: ....**PLATO-DISKS:**
Plato forSUPERSPACE-MODULE:

HighSchoolSkills Social-Studies-Behavioural-Science-1202-2;
BasicMathsBasicNumber-Ideas,......................................-5201-1,-5201-2;
BasicMathsGeometry 5218-1, 5218-2,, 5219-1a, 5219-1, 5219-2, 5219-3, 5219-4, 5219-5,
BasicSkillsReading, 5221-2, 5221-4, 5221-4, 5222-2, 5222-2, 5222-2, 5226-6, 5229-3, 5229-3, 5229-6, 5235-3, 5235-3, 5235-6, 5235-6, 5238-1, 5242-2, 5245-1, 5246-3;
HighSchoolSkills 5265-2, 5273-1, 5273-2, 5273-3, 5274-1, 5276-1;
HighSchoolMath....................5280-1,-5280-2,-5280-3,-5280-4,-5280-4a;
HighSchoolSkillsReading..........................… 5281-4, 5281-5, 5282-2;
HighSchoolSkillsPoetry ……………… 5288-1, 5288-2, 5288-3, 5288-4;
OpticsAndWaveMotion .... Tutorial 5291-3;
ElectricAndMagneticEnergyTutorial...5291-4;
HighSchoolScienceEarthScience 5294-3,-5294-4;
High School Science Biology 5295-6, 5295-7, 5296-1, 5296-2, 5296-3, 5296-4, 5296-5, 5296-6, 5296-7, 5297-1, 5297-1a, 5297-2, 5297-3, 5297-4, 5297-5, 5297-5a, 5297-6, 5297-6a, 5297-7, 5298-1, 5298-4, 5298-5, 5298-7, 5298-8, 5298-9, 5298-10; ....

BasicSkillsGrammar; BasicSkillsMaths; HighSchoolSocialStudies EC2 Consumption Tutorial & Drill; HighSchoolSocialStudies EC2 Dicision Of Labor Tutorial & Drill;

Disk only labelled by number: 5219-1, 5219-2, 5219-3, 5219-4, 5219-5, 5273-1, 5273-2, 5273-3, 5274-1, 5274-4, 5275-1, 5275-2, 5275-3, 5276-1, 5276-3, 5277-1, 5277-2, 5277-3, 5280-1, 5291-3, 5291-4, 5291-5, 5291-6, 5296-2, 5296-3, 5296-4, 5296-5, 5297-1, 5297-2, 5297-3, 5297-4, 5297-5, 5297-6, 5299-1, 5299-2, 5299-3, 5299-4, 5299-5, 5299-6, 5300-3, 5300-4.

INFOCOM GAMES for SUPERSPACE MODULE:..............……
MoonMist, SeaStalker, dskCFG.

TERMINAL EMULATOR2: Protocol;

TIBASIC: TE_IN_TIBas. Inventory, LoadMaster V2.1 Mickey Cendrowski, LoadMaster V2.2 Mikey Cendrowski, PRK+Call Test+CallMerge+FastFile+CovRK-DV, PRK Module, Shamus Maps.

MUSIC: …………………BodenmillerComposerDemo; **CHRISTMAS:** XmasMusX;

CLASSICAL: BachAnnaMagdalenasNotebook BruceH, BumbleBee, GoldbergBruceH, IlPastorFidoVivaldi, JCBOpus1-5-6, JCBOpus2-3-4, JCBOpus17, JSB2PartInventions, JSB3PartInventions, Lohengren1+Sig-LoadKenG, Lute, MusicX3, MusicX4, MusicX9, NannerIsNoteb LeopMozart, NutcrackerSuite, PotpourriBaroqueBruceH1, Potpourri BaroqueBruceH2, ScipovOpusV, ScipoOpusVOrig, SerenadeMozart, TheRingP1, TheRingP2, WagnerV1, WolfyAt8;

COUNTRY & WESTERN: …………………………..........… PatsyCline;

GOSPEL: …………………………………………..........… TigerCubGospel;

MISCELLANEOUS: ACNew, AMRevolBruceH, C14, C16, D13-14, EzMusic1, EzMusic2, EzMusic3, Hdemo2, KenSings, Lambton, Metronome, Metronome2, Music-2, Music-4, Music-5, Music-6, MusicPro, MusicPro2, MusicSkills-A, MusicX2, MusicX7, Mus-X-8, SFoster, SingAlongXB, Smusic, SongsEZ-1, SongsEZ-2, SongsEZ-3, StarTrek, StarTrek2, TigerCountry, TonyKnerr;

MUSICALS: MusicMan, SPacific-1, SPacific-2, WizzardOz; **POP:** BillKnecht-1, BillKnecht-2, BillKnecht-3, FosterS, PopDemoBoston, SingData1, SingingKen3;

UTILS: BackgroundsXB, Best99er-4, MusicCompiler.

NEWSLETTERS: Bill Gaskills Newsletter+Editor+Formatter, BruceH1, BruceH2, BruceH3, BruceH4, BruceH5, BruceH6, BruceH7, Lima39, Lima43, Lima44, Lima45, Lima46, Lima47, Lima48, Lima49, Lima50, LimaDec93JanFeb94, LimaLibraryCat, LimaLibraryCatAdd, LimaNovJun90.

PE BOX TECHNICAL: …………………… PEBoxMan1, PEBoxMan2.

PROGRAMMING LANGUAGES: C: C99Rel4, C99V4+CSUP_Update, C99V4DiskA, C99V4DiskB, C99V4DiskC, C99V4DiskE, CcompilerOld, CTutor3, KavanaghC99Bits; UTILS: LinkLibrarian_TomBentley, LinkLibrarianV0.1_TomBentley, ObjectLinkerV3_TomBentley;

EditorAssembler, AssemblyDisplayRoutinesDutchDemo, AssemblyDisplay RoutinesDutchGraphics, BEAXSV30, EDAS-ONLY, FractalExamples, FractalExplorerV3, FractalExplorerV3DOCS+Fractals, Star_TMS9900 RoutinesV1.0, UniversalDisassemblerV2.3, WordSearchFeb96, Wordsearch_Orig;

GAMES: 5EDAS-S4, 5EDAS-S5, 5EDAS-T1, 5EDAS-T2, 5EDAS-T3, 5EDAS-U-Z1, EA-LOAD1, EA-LOAD3, PHILIPS4_source, SquareBall, SuperDemonAttack, UnprotectedSpad2; OrigDisks, DiskA, DiskB, DiskA+B+BU; SOUND, SoundListDisk1, SoundListDisk2, SoundList Disk3;TUTORIALS,AssemblyMadeEasy_ Cook&JohnsonDisk1, Assembly MadeEasy_Cook&JohnsonDisk2, AssemblyMadeEasyDisk1, Assembly MadeEasyDisk2, MC-TUT-PT1, MC-TUT-PT2, Mudie_86_1, Mudie_86_2; UTILS, EAPlus, Pulsar_MikeAmundsen, RomstedtsLinks, Romstedts Links2, SuperBug;

FORTH: ©1982DFI, Data1JohnVolk, Data2JohnVolk, Data5Index2-3, Data6Cold, DoodlesHowieRosenberg, Forth_01-11-82, Forth_A-M, FORTH BOB LAWSON, ForthDoodles, Forth_N-Z, Forth_scr1, Forth_scr2, Forth_scr3, Forth_scr4, Forth_scr5, ForthCompilerDS, ForthCompilerSSV4.3, ForthData7, ForthDocsV2.1, ForthDSSD, ForthHops0V2.1, ForthHops1V2.1, Forth-Minimem, ForthScreens4 Index SC1-2,ForthSource_DiskA, ForthSourceDSSD_DiskB, ForthSwedishDSSD, ForthTutorials1, ForthTutorials2, ForthUse, ForthV4.5, Forth-XBLD, ForthXBLoad, ForthXBMM, HBMPrint, ManualA, ManualB, ManualC, ManualD, ManualE, TIForthScreens_Disk024;

GAMES in FORTH: SpaceStationPheta, SpaceStationPhetaInstructions, SpaceStationPhetaSide1, SpaceStationPhetaSide2; PILOT: Manual,

PROGRAMS: ....Forth_Utils,The-Printers-Apprentice-Disk1, The-Printers-Apprentice-Disk2, The-Printers-Apprentice-Docs;

LISP: Lisp99V2.0;

TIBASIC: BeginnerTutor, TeachBasic, TIB-TUT-A, TIB-TUT-D, TIB-TUT-E, TIB-TUT-G, TIB-TUT-I, TIMailinList1, TIMailingList;

LOGO: LogoAutostart+Chardef_Disk1, LogoAutostart+Chardef_Disk2, TI99_4A_Logo_D1, TI99_4A_Logo_D2, TI99_4A_Logo_D3, TI99_4A_Logo_D4, TI99_4A_Logo_D5, TI99_4A_Logo_D6, TI99_4A_Logo_D7, TI99_4A_Logo_D8, TI_MES_LIB;

MYARCXB: …………………..........… Educational1, Educational2, Educational3, READCheerFunIngolRall;

GAMES: TunDoom+Othello;

PROGRAMS: DavidVincentProgs1;

RAG-ASSEMBLER: V80DiskA, V80DiskB, V80DiskC;

Smalltalk: SmallTalkV5.0+MiniTalkV2.02DiskB,SmallTalkV5.0DiskA;

TRITONSXB: ClassSigns;

TURBO PASCAL:...................PascalMasterDSSD, PascalMasterSSSD, PascalMasterSD, Turbo99_1, Turbo99_2, TurboPascal99Docs;

XBASIC: Commonwealth_DonShorock, Education1, Education2, Education3, Educational, EuropeTime, FNLWBtutor, German_Don Shorock, JBM103, Kanafiler3, Mudie_86_3, Mudie_86_5_MorseCode, SpeechSet, SpeechRead, UltDelay;

ADVENTURE GAMES:..............Adoria+Atomsub+Fun-City, Alberon, Aztec, BALLYHODcircus, Beanstalk, CutThroats1, CutThroats2, Deadline, Deadline+Hitchhiker+Infidel+Witness, DoomCharCreator, DoomOfMondular, Enchanter, HollywoodHJ, LeatherGoddesses, LeatherGoddesses2, LurkingHorror, MSAdventureSeries, OldDarkCave, PlanetFall, PlanetFall2, PlunreredHearts, RagLoad, RegularDoom, RingWraith, Sampler1-2, Sorcerer, SpellBreaker, Starcross, Witness, ZorkAndStarcross, Zork-I, Zork-II, Zork-III;

FINANCIAL: CMPFAPA1AC;

GAMES: A29-30-31, A34-35, A38, B7-8, B9, Behnke, BeyondVideoChess, BoardGamesJimmyDowel, BridgeV3.01, ChineseChess, Collins, ComputerCrapsV2Romsoft, CrapsA40, DavidVincent1, Games1, Games1a, Games2, Games3, Games4, Games5, Games6, Games7, Games8, Games9, Games10, Games11, Games12, Games13, Games14, Games15, Games16, Games17, Games18, Games19, Games20, Games21, Games22, Games23, Games-24, Games-25, Games_v4-1, George-Fortune, Georges3, Georges4, Georges5, Georges9, GoblinMission, GravityMaster, IansGames01, Intercept, Jeux-1, Jeux-2, Jeux-3, Jeux-4, Jeux-5, Jeux-6, Jeux-7, Jeux-8, Jeux-9, Jeux-10, Jeux-11, Jeux-12, LunarPack, Mag1, Mag2, Mag3, MazeMania, MazeOfGrogV1+, MazeOfGrogV2, MbindOffDisk1, MonteCarloV4.3, OldiesButGoodies1+2, Phillips1, Phillips2, Phillips5, Phillips6, Spectrum1, Spectrum2, Spectrum3, Spectrum4, Thorne3, TI-PEI, TIPlayBookDisk1, TIPlayBookDisk2, TIRunner, TIRunner2, TIRunner3, TIRunner4, TITrek, Trivia99er, VirusAttackVernLJensen, VolleyBall, WarZone, WarZone_Orig, XB Detective_ Must Be Protected Or Will Destroy Itself;

MATHS: AddingFractions, AddSub-Multiply21-Starmaze1, AddSubOne-Elf-NumMagic-SpaceJourney, Computer MathsGames, Division-Milliken-NumReady, Edi-Tib, TI-Math;

TML: CirclesDemo,CirclesDemo2, GmanVaryXorVaryStep, Graphics Companion, SqareBall2, TMLDemo;

UTILS: AbbotSoft, Boot, DiskLabel, MailListManagerMAR95, MoveSprites,OldFiddlerInTIB_or_FiddlerXBQuickRun, QuickRun Demo Disk,RAG-Cassette-Loader,RAGUtilsV6, RemindMe, ScreenImage Dump V2_BillPeregrin&DaveRose,SmashprogramOptimizer,StorMor, Teach UR selfXB,TextReformatter,TIMailingList_XB,TimeCalculator, TXT2 SPEECH, UltimateAcceptAt, UTXB8, UTXB9, UTXB10, UTXB11,

UTXB12+XBBUG+ Prescanit + Banner, XBToolsV1.2, XBUtils Vol1_BruceHarrison, XBUtilsVol2_ BruceHarrison, XDP_ Extended Display Pack; XHI: XhiArc;

UTILS: Alex-STA01, Basic BuilderV2.3_ DV80 to TIBor XBDisk1, BasicBuilder V2.3 DV80toTIB orXBDisk2, Basic BuilderV2.3 _Disk1, BasicBuilderV2.3_ Disk2, BasicSort, BootDiskChangerV2.1, Display Enhancement Package TIB+XB, EnhancedDisplayPackageV2.2, Enhanced NDisplayPackageV2.4, Stats1EAXBload, Stats2EAXBload, Stats3EAXBload, Stats4EAXBload.

SOUND: …………………………SoundFX_ARCs, SoundFX_data1, SoundFX_data2, SoundFXMaster, SoundFX_StarWarsARC.

SPEECH: …………………………...…… TI-Sings, XBTUT5-6-7.

MULTIPLAN: ……………………...............…… Exercises1, Exercises2.

TELECOMMUNICATIONS: FastTermSRCarc, Prestel, TE3_V3_3, TE3arc, TE3Source_V3_0, Telco2.3, Term80V3.14Demo; TE2: TE2Progs.

TIGERCUB: CryptogramBible, CryptogramSong, Games1465, MenuLoader, NewTips, Nuts&BoltsAutoloadAutolrunAutorepeat, TC1, TC2, TC3, TC10, TCBest1985, TCBrainGames1985, TCBrainTeasers1985, TCKaleidoscope & Displays1985, TipsVol1, TipsVol2, TipsVol3, TipsVol4, TipsVol5, TipWriter + Name-it; NUTS&BOLTS: DOCS, DOCS2, DOCS3, Nuts&Bolts, Nuts&Bolts2, Nuts&Bolts3.

TIMANUALS: Intern1, Intern2, Intern3, Intern4, TI-MAN1, TI-MAN2.

TIMELINE: ....TI-Line79-89.

TI-MES: ....TI-MES39, TI-MES40, TI-MES41, TI-MES41a, TI-MES42, TI-MESTEXT-1, TI-MESTEXT-2, TI-MESTEXT-3, TI-MESTEXT-4, TI-MESTEXT-5, TI-MESTEXT-7.

UTILITY DISKS: ....AdvanceDiagnostics, DiskBootChangerV2.1, BootMenu, Borders1a, Borders1b, CallFiles, Cert99Companion, Cert99 CompanionPlus, Cert99V2.0, CodeBreakers, DannyDump, Diagnose-2, dijit, Explorer, EZ-Keys, Fonts1a, Fonts1b, Fonts+Borders Vol4, Fonts+ BordersVol5, Graphics Expander+BigType, GromDumpForModules, HotBugDebuggerCEarl, IncomeProg, JoeNollan1988, JPASort&Dump, LabelmakerPlusWithInstances, Manipulator4, MassCopy+, MC1-B_54A, MikeMachonisLABELS, Navarone-1984-Debugger+Source-Code Bugfixer, NeatLister, Password Cryptogram Bruce Harrison, Plus1&2, ProgAids2&3, RandomNumber Utils_Harrison, Rebel, RemindMe, RemindMe V1.2_ JohnJohnson, Screen DumpV3.0, ScrollExperim, SDL_Editor,Spell&Sort,SpellChecker_CopyToRamdisk UseEMDK_EQ_1, SuperBug2V1.0, SuperBug2V2.0, SysDsk LoaderV5_4_Disk1, SysDskLoaderV5_4_Disk2, ToolKitV2, TXTLoader, util1, util2, util3, util4, util5, util6, util7, util8, util,9, util10, util11, util12, util13, util14, util15, util16, util17, util18, util19, util20, util21, util22, util23, util24, util25, util26,

util27, util28, util29, util30, util31, util32, util33, util-A, util-B, util-C, VideoTiler+Drawing_Harrison.

WORD PROCESSORS: BAWriter_PaoloBagnaresiV1.4, BAWriter Last VersionDisk1, BAWriterLastVersionDisk2, Fonts_U-Z1, FontsA1, FontsA2, FontsB1, FontsB2, FontsB3, FontsB4, FontsC1, FontsC2, FontsC3, FontsDE+F2, FontsF1, FontsGH1, FontsGH2, FontsGH3, FontsIJ1, FontsIJ2, FontsKL1, FontsKL2, FontsM1, FontsN1, FontsO1, FontsO2, FontsO3, FontsPQ1, FontsPQ2, FontsR1, FontsS1, FontsS2, FontsS3, FontsS4, FontsS5, FontsT1, FontsT2, FontsU-Z2, PressCharlesEarl, ScreenFontsD1, ScreenFontsD2, TI-pewriter, TIWEditorSource, WriterEase1, WriterEaseDictionary, WriterEase Orig; BRUCE Harrison WP: PrintmanWP, PrintmanOrig, WordProcessor, WordProcessorOrig;

FNLWB: V5-40col: FnlwbV5.01-40col+Docs DSSD; V5-80col: European+Formatter, TIWREQ+SUPPLEMENTARY+FILES+ Accompanying V5 Editor, FnlwbV5-80; V5.5-40col: FnlwbV5.1, FnlwbV5.2, FnlwbV5.3, FnlwbV5.4, FnlwbV5.5; V5.01-40col: FnlwbV5.01-40col; V5.01-80col: FnlwbV5.01-80col;

UTILITIES: Tony-MCG1, Tony-MCG2, Tony-MCG3, TXTSort; RAGWriter: Rag-WriterV5.0;

SIDEWRITER: CharsEurowriter9, CharsU4U9, SidewaysCharsUtil, SideWriter;

THE PRINTER'S APPRENTICE: The Geometers ApprenticeV1.0, TPAfonts1, TPAfonts1a, TPA fonts2, TPAmorefonts, TPAprograms, TPAtoolbox1, TPAtoolbox2_TboxForm Corrupted, TPAV2.0, TPAV2.01;

TIWRITER: Disk_Orig, Eurowriter;

UTILITIES: FontMakerV2.1, HomePublishingWithThe99_4A, JiffyFlyer, SidePrintV3.4, SideWriterV2.1_MauroTomietto.

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MODULE *LIBRARY* as of *JUNE 2016*

TITLE		QTY IN STOCK/PRICE
ADDITION AND SUBTRACTION 1	(TI)	2 £3.00
ADVENTURE COMPLETE WITH PIRATE TAPE	(TI/SCOTT ADDAMS)	6 £5.00
ADVENTURE (MODULE ONLY)	(TI/SCOTT ADDAMS)	7 £3.50
ALIENADDITION	(TI)	1 £3.00
ALPINER	(TI)	4 £8.00
A-MAZING	(TI)	11 £3.00
BEGINNING GRAMMAR	(TI)	3 £3.00
BLASTO	(TI)	2 £4.50
CAR WARS	(TI)	2 £4.00
CHISHOLM TRAIL	(TI)	2 £3.50
CONNECT FOUR	(TI/MILTON BRADLEY)	4 £3.50
DEFENDER (not for MARK II CONSOLES)	(ATARISOFT)	1 £4.50
DISK MANAGER	(TI)	6 £2.00
DISK MANAGER 2	(TI)	3 £4.50
DIVISION 1	(TI/MILTON BRADLEY)	2 £3.00
EARLY LOGO LEARNING FUN	(TI)	1 £3.00
EDITOR ASSEMBLER (with MANUALS & DISKS)	(TI)	5 £25.00
EXTENDED BASIC (with MANUALS)	(TI)	4 £22.50
EXTENDED BASIC (MODULE ONLY)	(TI)	10 £15.00
EXTENDED BASIC (BOXED)	(TI)	1 £40.00
FRACTIONAL NUMBERS	(TI)	1 £3.00
HANGMAN	(TI/MILTON BRADLEY)	1 £3.00
HOUSEHOLD BUDGET MANAGEMENT	(TI)	6 £3.50
HUNT THE WUMPUS	(TI)	1 £4.00
HUSTLE	(TI)	1 £3.00
INDOOR SOCCER	(TI)	3 £4.00
JAWBREAKER II	(TI/SIERRA-on-LINE)	1 £4.00
MICROSURGEON	(TI/IMAGIC)	1 £4.50
MINI MEMORY (LINE/LINE ASSMBLER & MANUAL)	(TI)	4 £15.00
MINI MEMORY (AS ABOVE plus MINI WRITER)	(TI)	2 £18.00
MINUS MISSION	(TI)	4 £4.50
MOON PATROL	(ATARISOFT)	2 £4.00
MULTIPLAN (SOFTWARE & MANUALS, BOXED)	(TI/MICROSOFT)	1 £40.00
MULTIPLAN with (SOFTWARE & MANUALS)	(TI/MICROSOFT)	2 £20.00
MUNCH MAN	(TI)	3 £3.50
MUSIC MAKER	(TI)	3 £4.50
NUMBER MAGIC	(TI)	2 £3.50
PAC MAN	(ATARISOFT)	1 £3.50
PARSEC	(TI)	3 £4.00
PERSONALREALESTATE	(TI)	1 £3.00
PERSONAL RECORD KEEPING	(TI)	9 £3.50
PERSONALREPORTGENERATOR	(TI)	2 £5.50
COMBI PRK. Plus PRG. SWITCHABLE.	(TI)	1 £12.00
PHYSICAL FITNESS	(TI)	1 £4.00
PROTECTOR II (NOT MARK II CONSOLES.)	(ATARISOFT)	4 £5.00
PROTYPER	(ROMOX)	1 £20.00
RETURN TO PIRATE'S ISLE	(TI/SCOTT ADDAMS)	1 £3.50
SHAMUS (NOT MARK II CONSOLES)	(ATARISOFT)	4 £3.50
SPEECH EDITOR	(TI)	1 £3.50
SUPER DEMON ATTACK	(TI/IMAGIC)	1 £4.50
TERMINAL EMULATOR II	(TI)	7 £5.00
THE ATTACK	(TI)	2 £4.00
TI INVADERS	(TI)	4 £4.00
TI LOGO (WITH ORIGINAL FOLDER & MANUAL)	(TI)	1 £15.00
TI WRITER (MODULE ONLY)	(TI)	2 £8.00
TOMBSTONE CITY	(TI)	7 £4.00
TUNNELS OF DOOM (WITH CASSETTE)	(TI)	1 £3.50
VIDEO CHESS	(TI)	3 £5.00
VIDEO GAMES 1	(TI)	2 £3.50
YAHTZEE	(TI/MILTON BRADLEY)	2 £3.00

Contact Francesco for information on shipping Modules Home and Away

2016 J. P. A. Awards

Dear-TI99ers,

It is with honour and great pleasure to announce and congratulate the following recipients of the 2016 Jim Peterson Achievement Awards.

SOFTWARE: Mike Brent (Tursi) (For his reams of software for the TI-99/4A.)

HARDWARE: Tony Knerr (For his cartridge work such as the 'RXB 2012'-and-the-new-'XB2.7'.)

COMMUNITY SERVICE: Chris Schneider (For his work with the SHIFT838-Newsletter.)

LIFETIME ACHIEVEMENT: Also, in recognition of years of support of the United Kingdom and European TI99 communities since 1981, it is with great pleasure to announce the presentation of the 2016 Jim Peterson Award to the TIUGUK (TI-99/4A User Group United Kingdom). Again, congratulations to the deserving nominees for and recipients of these prestigious awards …………… and thanks to all who participated.

Respectfully,

Glenn-Bernasek,-Administrator

Jim Peterson Achievement Awards

Glenn Bernasek during the Chicago Faire 2009, explaining the Jim Peterson Award.

The Following Explanation Taken From TI-Chips' Online

"The late Jim Peterson made an invaluable contribution to the Texas Instruments 99/4A home computer community. His selfless and tireless work in many areas of TI-99/4A related material made him recognized throughout the world-wide network of TI-99/4A users.   As such, in an effort to further the spirit that his work had started, the following award system is enacted: **The Jim Peterson Achievement Award.** This will recognize TI-99/4A users and user groups for their outstanding achievements. The awards will be broken down into four areas. They are as follows: TI-99/4A **Software**, TI-99/4A **Hardware**, TI-99/4A **Community** and **Geneve 9640** achievement."

The Jim Peterson Achievement Award
13246 Harper Road
Strongsville, Ohio 44149-3942
USA

June 1, 2016

Mr. David Caine
18 Merebank Road
Crewe, CW2 8AS, Cheshire,
United Kingdom

Dear David:

We are honored to present to you the enclosed 2016 Jim Peterson Lifetime Achievement Award certificate in recognition of the TI-99/4A User Group United Kingdom (TIUGUK) publications that provided valuable information for United Kingdom and European TI-99/4A users since 1981.

Dedicated involvement such as yours on the behalf of TI99ers are what helped keep our community viable for all these years.

Sincerely,

Glenn Bernasek, Administrator
Jim Peterson Achievement Awards

The Above Letter that came with the TIUGUK Lifetime Acheivement Award.
The TIUGUK Group wishes to thank All Who took part in the Nomination Proccess and we Look Forward to Another few Years of Achievements.

The Jim Peterson Lifetime Achievement Award

In Recognition of the

TI-99/4A User Group United Kingdom

For their continuing support of United Kingdom and European TI-99/4A users since 1981.

Awarded on this First day of June, Two Thousand Sixteen
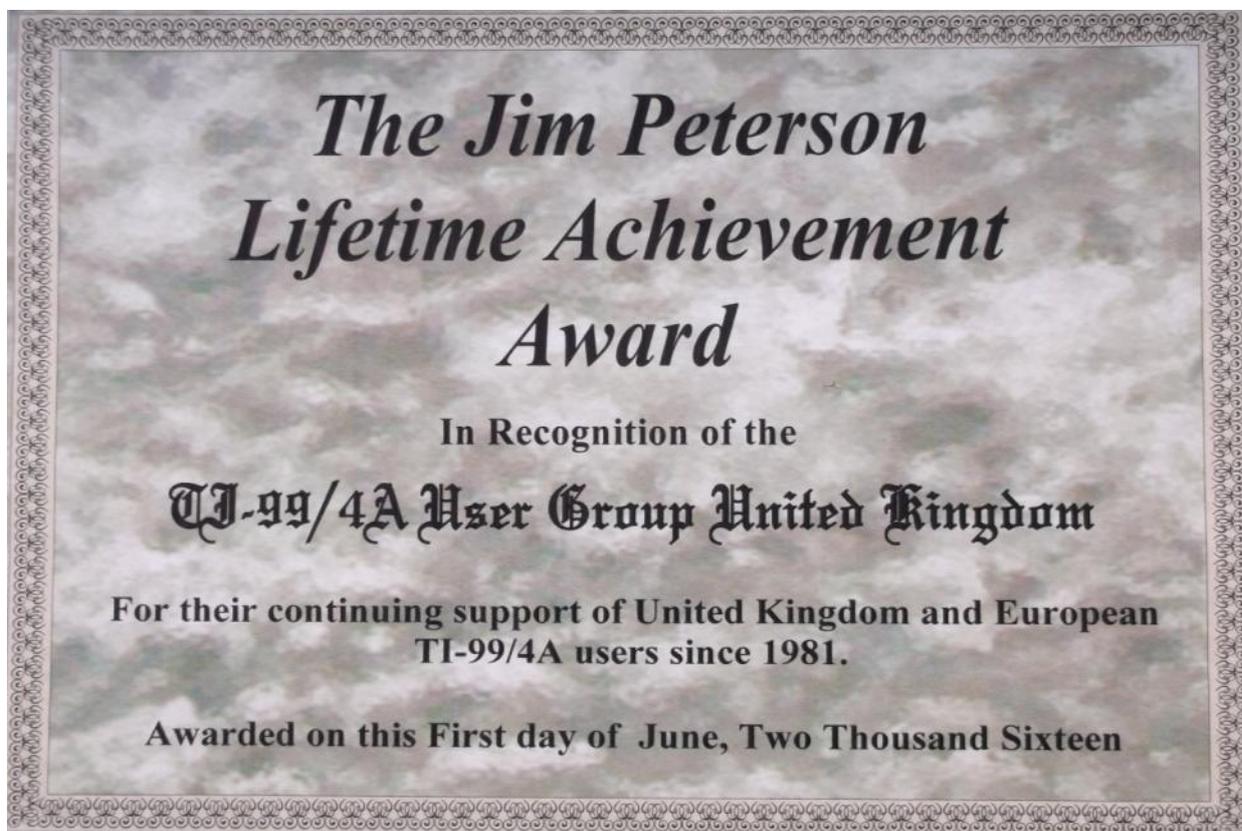
31st European TI Treffen   September 30, October 1 and October 2, 2016   Hotel Svalen near Copenhagen
Roskildevej 333, Baldersbrønde, 2640 Hedehusene
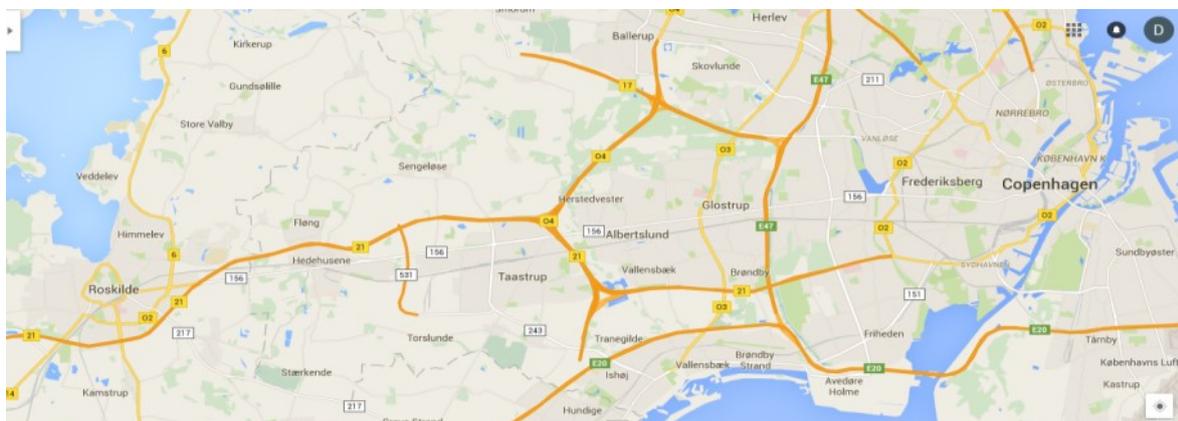
Jens-Eike Hartwig is doing the organizing of this Treff ---Contact him on **je_hartwig@yahoo.com** ------or by **Phone 0049 4619787778** after 8pm

A few kilometers outside of Copenhagen and

The Svalen Hotel in Hedehusene and Jens-Eike Hartwig have agreed a

TWO DAY PLAN which includes.

THE AMOUNTS:

 "day meeting" (døgnkursus) includes: Coffee, bread and cheese (Kaffe, franskbrød, ost)   LUNCH (frokost)Water and fruit (isvand, frugt)   TWO COURSES DINNER and water FruitCoffee and cake MEETING ROOM (Lokaleleje)   at DKK 1195,-/995,- per day and person (double/single) including breakfast

So this includes DINNER and some catering for two days, plus (2) NIGHTS STAY and MEETING ROOM.

Calculating:

TWO PERSONS for TWO DAY/NIGHTS STAY in DOUBLE ROOM: DKK 1195*2= DKK2390 or EUR 319 or GBP 250 or US$ 360

Calculating:

ONE PERSON for TWO DAY/NIGHTS STAY in SINGLE ROOM: DKK 995*2 =DKK 1980 or EUR 268 or GBP 212 or US$ 302 .

Anyone Not staying at the Svalen Hotel will have to Pay a portion of the MEETING ROOM and DINNER and LUNCH costs if they decide to attend and make use of the amenities on offer.

These prices are what I could understand from the one and only e-mail that was sent to me by Jens-Eike Hartwig on April 22nd.2016.

Flight from Manchester to Copenhagen and then Train Journey and then Taxi

The **Train journey** will be from **Copenhagen Airport** to **Copenhagen City Station** about 15minutes at a cost of about **£5 or Euros6 or US$7** one way and then by **Train from Copenhagen City**
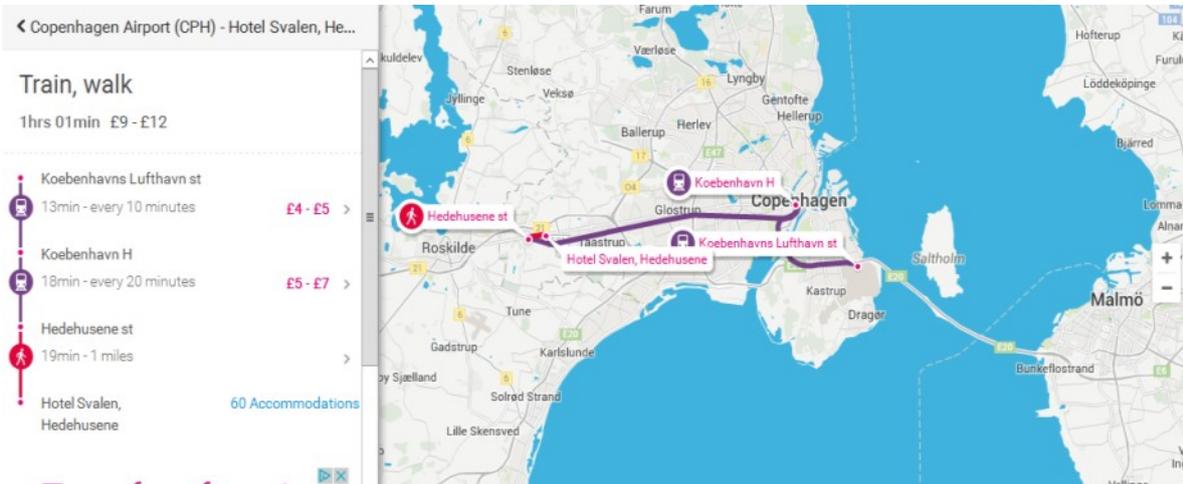
Station to **Hedehusene Station** about 20 minutes at a cost of about **£7 or Euros9 or US$10** one way and then by **Taxi** **from Hedehusene Station to the Svalen Hotel** about 1 minute at a cost of **£8 or Euros10 or US$12** one way .
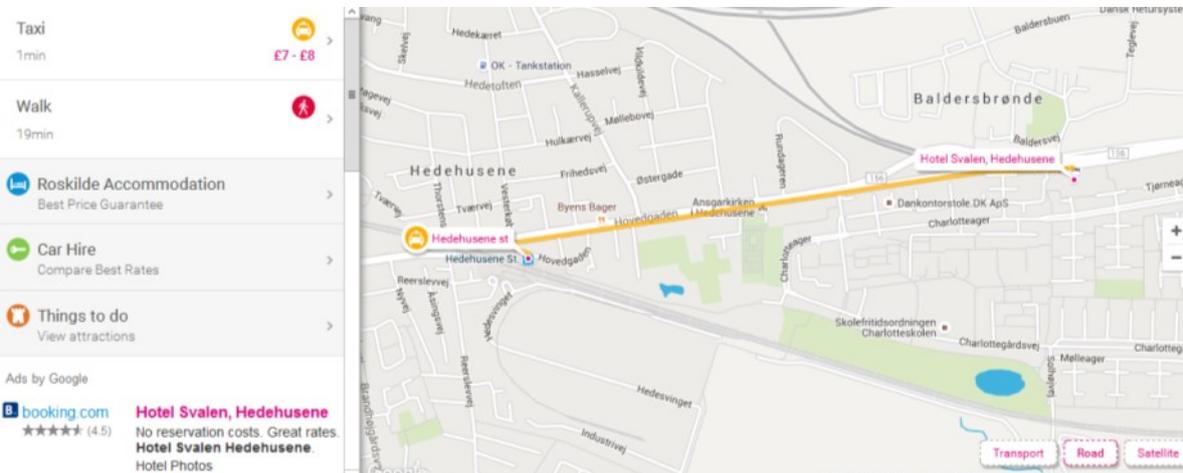
TIUGUK Yearly Accounts at--------2015/2016

Richards's accounts
16/05/2015…........PreviousBalanceCarriedForward £280.00
31/05/2016…No Movement Total……………………………£280.00

TIUGUK.Paypal Account at--------- June 2016

David's /Trevor's Membership fees accounts
15/06/2015…........Balance Carried over from last year…..….…..£87.51
02/07/2015………Paul Mugleston (membership fee)……….…..£8.49
12/07/2015 .Profit from Purchase of Trevors TI Hardware........£200.00
31/07/2015 ....Barry Simpson. (membership fee).......................£8.49
02/11/2015 ....Profit from Crewe Treff £53.90
26/11/2015..Profit from Selling Geneve 9640 & HFDC Cards...£100.00
12/12/2015........... Stephen Walters (membership fee).....................£8.49
15/12/2015............Ronald Van Kleunen (membership fee £8.33
05/02/2016...........Eamon Doran….(membership fee).....................£8.45
17/02/2016............Stephen Shaw … (Donation) £10.00
09/04/2016……....Alf Cooper ……. (membership fee) ….....…..... £9.00
09/04/2016……....David Caine ……(membership fee) …..….…... £10.00
30/04/2016……....Gary Smith…...... (membership fee)………..…. £9.00
20/05/2016…..……Trevor Stevens….(membership fee)………....…..£8.49
23/05/2016…..…...Francesco Lama (membership fee)………...…..£8.49
26/05/2016……....Mark Wills……...(membership fee)…………….£9.00
20/05/2016……………...Cost for Pillings Lock AGM 2016...…..£101.20
………………Running Total as of 31/05/2016………………….£446.44

DISK/MODULE Library Balance at - June 2016

Francesco's accounts.
Running Total as of June 2015……………………....................…… £256.27
31/05/2016 …No Movement Total…………………………….£256.27

TIUGUK *Membership* Update -- Dec 2016

Please Keep your *Group Alive* and to all users in

UK and some from abroad that our group needs your yearly membership fee, as this year it is **£9** or **DKK86** or **EUR12** or **US$13** and this goes towards Updating our New and Old Software and Hardware Collection and keeping prices down for members, and with us now down to one venue per year such as our **Workshop and Annual General Meeting** we are able to make it into a **two or three day event** which is more practical for users from afar, and as a rule these events cost, to hire a Meeting room or hall for three days would be any ware between £100 and £200 per weekend. This is where your commitment comes into play, to say well in advance whether you will be attending our **Workshop and AGM** or you will be paying **MEMBERSHIP FEES** Or both! . We now have a regular **TWICE per year TI*MES VOLUME 2 publication** which has now been running from August 2013 and is distributed electronically by E-mail to now about 125 users worldwide, and if you can attend a **Workshop and AGM** you will be supplied with an updated A5 Glossy paper booklet of the same at no extra cost.

MEMBERSHIP PAYMENT, if you have a **PayPal account**, just go to your account and one option will be to 'SEND MONEY' click on and send £ 9 to **chairman@ti99ug.co.uk** and put in comments box 'this is for MEMBERSHIP June 2016 to June 2017' or whatever date you want! it may cost about 40pence to send, depends on account. If you have an e-mail address you can access PayPal by giving them access to your credit or debit card , you don't have to put money in but they will charge about 4% when you make a transaction, which is about 40pence in every £10 .
 (Please note there will be a small extra charge for currency conversion.)
Any Issues with Payment Please Contact
User Group Chairman: Trevor Stevens ------- on cell: +44 (0)7968370589
or E-Mail: **support@doctoremote.co.uk** Or Contact:
Richard Twyning on **richardtwyning@gmail.com** or +44 (0) 7767445658
David Caine on **cainehd@gmail.com** or +44 (0) 7752052117

 THANK YOU

THE *BOARD* OF THE *TIUGUK*
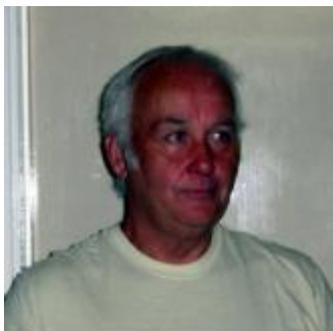
TREVOR STEVENS
GROUP CHAIRMAN
support@doctoremote.co.uk
+44 (0)7968 37 05 89

RICHARD TWYNING
TREASURER & SECRETARY
richardtwyning@gmail.com
+44 (0)7767 44 56 58

FRANCESCO LAMA
GROUP MEDIA LIBRARIAN
f.lama@ntlworld.com
Cassette, Disk and Module

DAVID CAINE
GROUP EDITOR & MEMBERSHIP
cainehd@gmail.com
+44 (0)7752 05 21 17

BERRY HARMSEN
CONTRIBUTING EDITOR
berry.harmsen@gmail.com
Reporter from the Netherlands