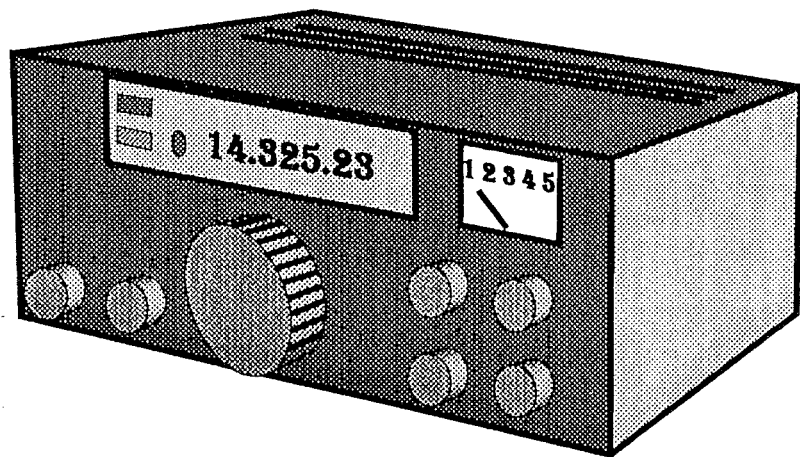


# GATEWAY

*The Official Journal  
of the Gippsland Gate  
Radio & Electronics Club*



JUNE 1995

# GIPPSLAND GATE RADIO AND ELECTRONICS CLUB INC

## COMMITTEE MEMBERS 1995/1996

<b>President</b>	Albert Hubbard	VK3BQO
<b>Secretary</b>	Dave Campbell	VK3XMF
<b>Treasurer</b>	Ian Jackson	VK3BUF
<b>Committee Member</b>	Helmut Inhoven	VK3DHI
<b>Committee Member</b>	Graham brennan	VK3KCS

**Magazine Editors:** Graham VK3KCS & Ted VK3XLE  
**Printing & Dispatch:** Graham Brennan Ph. (059) 963298  
**Deadline for articles in next months issue: Tues. July 11th**

Club Meetings held at the Cranbourne Girl Guide Hall in Grant St.  
Cranbourne. Meetings comence at 8.15 pm on the third Friday of each month

**Club Station: VK3BJA Located at the Guide Hall**

Repeater-----VK3RDD in 52.575 out 53.575 Mhz  
HF-----28.325 Mhz , USB  
VHF-----146.225 Mhz , FM  
UHF-----438.850 Mhz , FM

**ALL VISITORS WELCOME**

## *EL PRESIDENTE' REPORT*

Well I told you that winter would soon be here. One can always guarantee getting that one right. So it looks like it is time to plan for the wintry type activities such as snow trips and four wheel driving in the mud. Great to put these ideas on paper -- not so easy to implement. Time seems to be in the limiting factor in most activities these days but lets see what we can get up to over the next few wet months. Elsewhere in the mag you will see that the committee has come up with some ideas for us all.

Seems as though the theme idea at prac nights may require a rethink. The response to the plain old resistor was not great, so a hands on approach will be tried next. At the next prac night we will attempt to teach one and all the correct methods of soldering and desoldering on circuit boards and other items. Yes you will even be able to try it yourself. A couple of years ago, we started an event which has become an annual one, that is the dinner night. This year is no exception and this night is to be held on the first of July. The rules have not changed from last year ( see later advertising ).

Hopefully you have all become aware of the new look magazine. The credit must go to our new editor and co-editor ( Graham and Ted ). The constant change of the appearance may spark enthusiasm for potential writers. Graham has informed us that he has gained sponsorship for the magazine in that the printing will be performed free to us for placing an advert for the printing company somewhere inside. For this I wish to thank that company ----- **PHOTO ART** of Cranbourne. As none of us are set up to do as good a job, it will indeed relieve the strain somewhat.

Guest speakers are not an easy thing to organize. This month yours truly will attempt to bring you up to date with the new Austel 8 digit telephone dialing system being introduced into Australia. It really is a challenge for Telecom etc. when you look at it from their side of things. Don't bother to bring a calculator. It isn't all that bad. See you at the **AGM**.

# EVENT — QUEUE

Friday	16.06.95	Club Meeting	
Sunday	18.06.95	Science Museum	11.00AM
Saturday	01.07.95	Mid Year Dinner	06.30PM
Saturday	12.08.95	Star Watch at Rialto Tower, City	07.30PM
Saturday	16.09.95	White Elephant Sale	10.00AM
		Stall holders	07.30AM
JOTA	21 & 22.10.95	Girl Guides Hall	TBA

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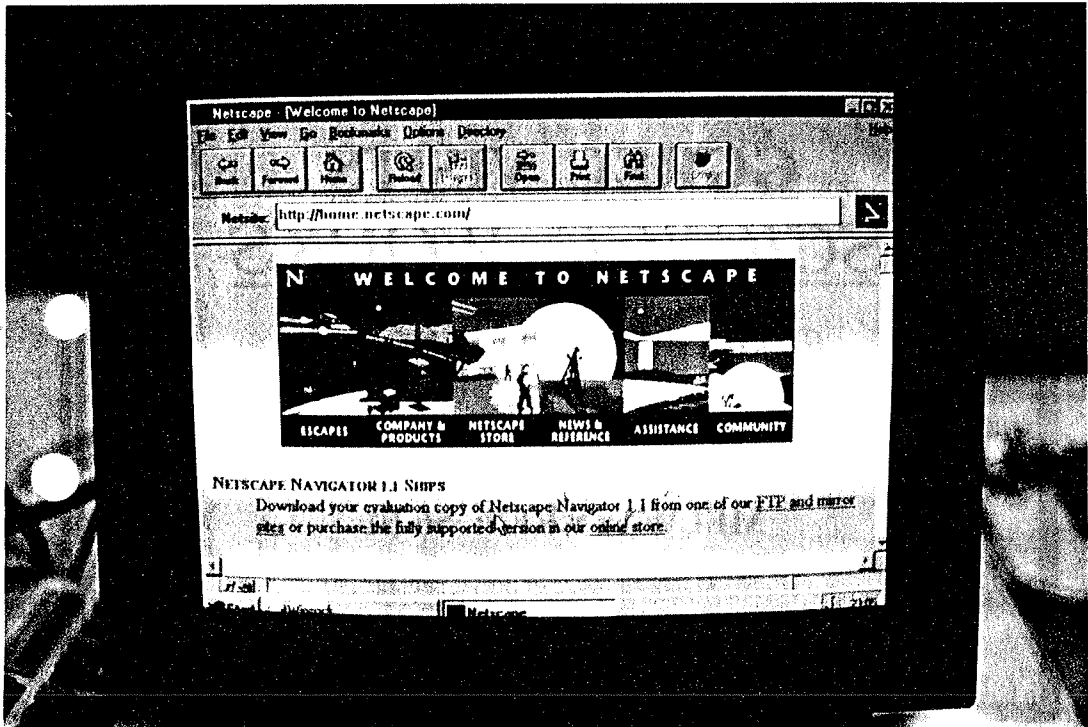
## INTERNET LECTURE / DEMO BY NETSPACE

On May 19 we were fortunate enough to have Stewart Marburg, Simon Wilson and Tom Wilson (VK3DTW) come along and demonstrate the workings of Internet. A PC, a modem and appropriate access codes are all that is needed for searching some of the worlds largest and most diverse databases for information on almost any topic.

Additionally, there are thousands (Millions?) of organisations that gazette their electronic mail addresses for incoming and outgoing correspondence. Our demonstration showed how easy it was to download the latest news and reviews from the WIA in Sydney and the ARRL in the USA.

Upon dialling a number in Melbourne, a service provider, in this case 'Netspace' in Hartwell, you are connected to a server that has full access to international links. Access costs are \$165 (non-business) for 30 hours per month, for a twelve month period. Those present were stunned by the amount of information available. It was a lecture that will be remembered for some time to come.

(Ring Netspace on (03) 9889 1122 for more information.



**GGREC VISITS**  
**SCIENCE WORKS**

**SUNDAY 18TH OF JUNE 1995**

**MEET AT SCIENCE WORKS 11.00 AM**

**MELWAYS REF: 56 B1**

**BAXTER TAVERN**

Well folks the night out at the Baxter Tavern was a great success. Although being a cold and rainy night it was very warm and welcoming inside. With good food and all the salad & desert you could eat at a very reasonable price, I think everyone that attended had a enjoyable evening. The cowboys & cowgals were doing a thing called line dancing which was very interesting to watch. Sure hope we can do it again sometime, only next time we must remember to bring our TEN GALLON HATS. Ha Ha Ha.



# GET MORE FROM YOUR RT85

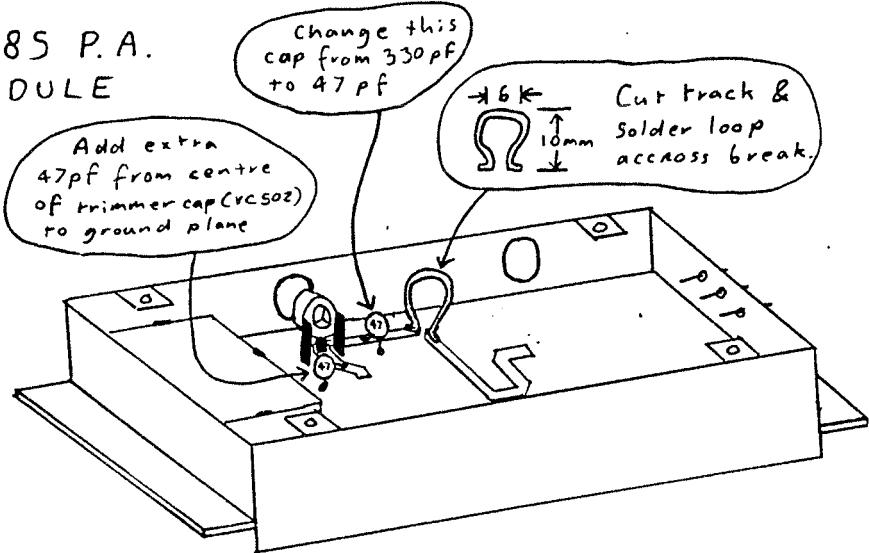
Ian VK3BUF

Recently I used the P.A. module from an RT85 transceiver as a new output stage on our Club repeater, VK3RDD. I employed the same modifications as outlined in the kit notes that other members have been working from. I was concerned about the excessive power consumption from the 12V supply and the high running temperature at the P.A. heatsink. After a little experimentation I proved that thought resonant, the L and C ratio's in the final tank cct. were unbalanced. By cutting the main RF output track and inserting an old resistor pigtail, bent into a horseshoe shape, the amount of 'added C' could be reduced significantly. After making the three changes shown below, connect the set to a dummy load via a wattmeter and re-tune the VC502 trimmer for a maximum RF output reading. You will have to disable the output limiting circuit in the P.A. module before tuning. Do this by temporarily removing the yellow wire from the feedthrough post inside the P.A. module. Alternately, you can do the trimpot mod as described at the bottom of this page and set the output to maximum via VR401 on the driver board.

Note that the output should peak with the screwdriver slot in the trimmer resting in a *diagonal* position and that the output should peak in *two* places during full rotation. If the trimmer slot is exactly vertical for maximum output, it means that the trimmer has run out of spread and one of the 47pf caps should be increased by 10-20 pf.

Before the modifications the set would draw an ugly 9 Amps for a 30W output. After the mods, a 30W output would draw only 6.5A from the 12V supply.

## RT85 P.A. MODULE



On the Transmitter Driver board there is a white 50K trimpot (VR401) near the red LED. This trimmer is used to set the output power of the transceiver via an RF sensing cct. In the PA module. The trimmer will typically give an RF output swing of 15-30 Watts. Note that one leg of this trimmer has a tiny one-eighth watt resistor between it and the ground plane. If you short out this tiny resistor, or replace it with a fixed strap, you will find that the trimpot will now give the full possible output swing that the transmitter is capable of. On my set the output was nearly 60W! I suggest that a little bit of output limiting be used. As I intend to take my set mobile, I left it at 50W. If you are going to use the set from home just to access our repeater then give your power supply a holiday and set the output at 20-25W. I would not set the output to much below 20 watt as the quality of emissions might suffer. Would you drive a V8 with six spark plugs removed?

Catch you on six metres! If you have any problems, give me a call.

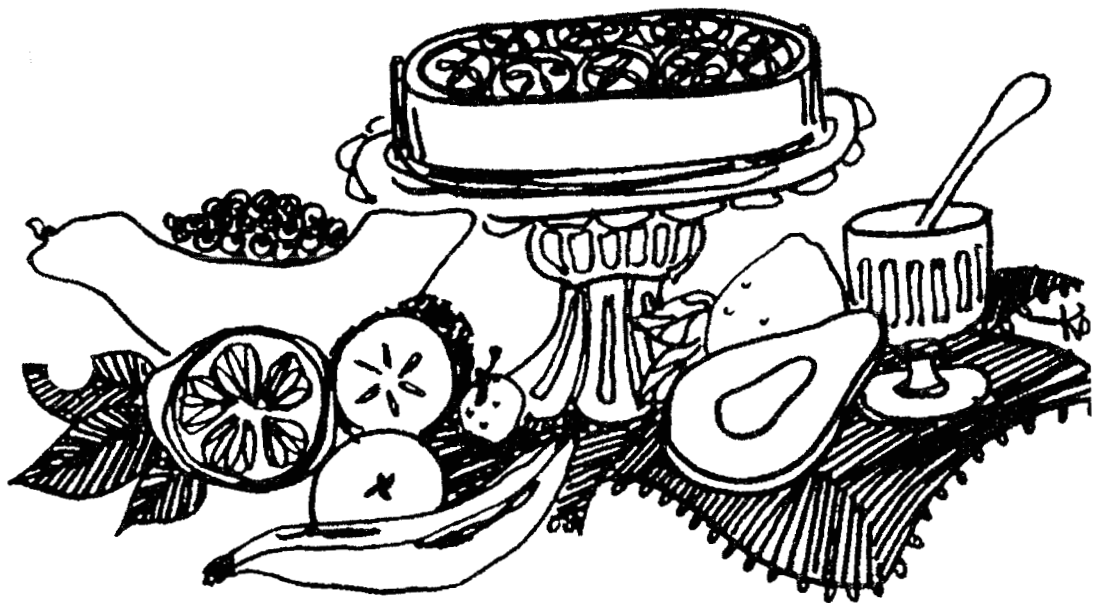
BUF.



# DON'T FORGET THE GGREC MID YEAR DINNER

*SATURDAY 1ST JULY 1995*

*STARTS 6.30 PM*



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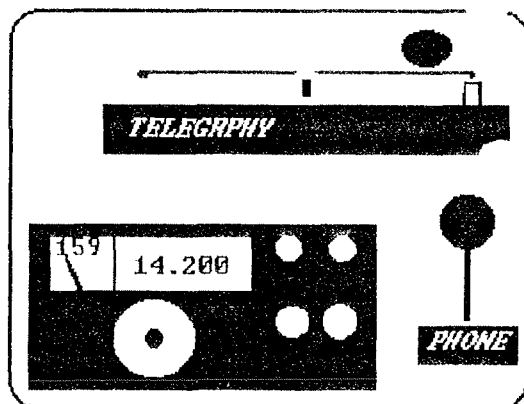
## ***BYO FOOD & DRINKS***

FAMILIES BRING MAIN COURSES  
SINGLES BRING SOME MUNCHIES

Glasses, cutlery, crockery, tables, chairs  
and microwave oven are all supplied.

# CONTEST CALENDER

*Cranbourne.*



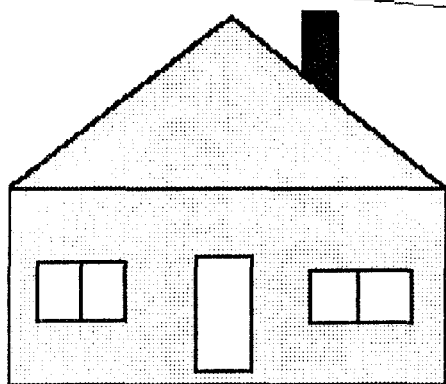
## What is happening on the Bands.....

June 17 & 18	WIA Novice Contest
June 17 & 18	All Asia CW DX Contest
June 24 & 25	ABRL Field Day
July 01	Australasian Sprint 80 m CW
July 01 & 02	Venezuela SSB DX Contest
July 08	Australasian Sprint 80 m Phone
July 08	Jack Files Memorial 80 m Phone
July 08	West Australian 80 m SSB Contest
July 08 & 09	IARU HF Championship

JUNE 1995

PROPAGATION

Sunspot No. 17



SOME STATIONS WORKED  
ON 20 METRES:

DK - GERMANY  
G - ENGLAND  
EA - SPAIN  
OK - CZECHOSLOVACIA  
S5 - CROATIA

STATIONS WORKED  
ON 15 METRES

AUSTRALIA  
NEW ZEALAND  
PAPUA NEU GUINEA

STATIONS WORKED  
ON 40 METRES

JA - JAPAN, AA - USA

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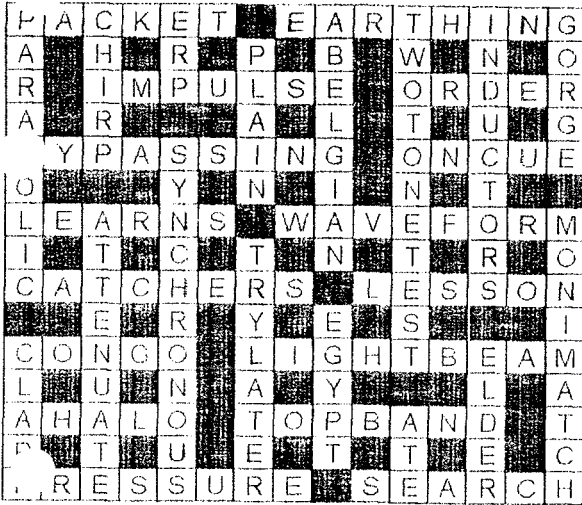
SIGNALS WERE AVERAGE, S3 - S9  
DEPENDING ON COUNTRY

# **CHANGE OF ADDRESS**

**GGREC NEW POSTAL ADDRESS**

**P.O. BOX 1098  
CRANBOURNE 3977**

# ANSWERS FOR MAY CROSSWORD



## ACROSS

- |  |   |
|--|---|
| 1 Type of binary transmission (6)                | 20 Resonant microwave cavities (8)                  |
| 4 Connecting to ground (8)                       | 21 Lecture (6)                                      |
| 10 Noise. A blanker may help (7)                 | 23 T.N (5)  |
| 11 Arrange (5)                                   | 24 Transmission in the micron band (5,4)            |
| 12 Using capacitor to keep R.F.from DC circuitry | 26 A VHF mobile antenna (1,4)                       |
| 14 At pre-arranged signal (2,3)                  | 27 160 metre amateur allocation (3,4)               |
| 15 Studies (6)                                   | 29 Air property of interest on 144Mhz and above (8) |
| 17 Electromagnetic signal shape (8)              | 30 Fox hunt (6)                                     |

## DOWN

- |   |                                       |
|---|---------------------------------------|
| 1 Shape of UHF high gain antenna (9)        | 13 Locked into clock signal (11)      |
| 2 CW frequency instability (5)              | 16 Diminish input signal (9)          |
| 3 Effective radiated power (1,1,1)          | 18 Type of RF impedance bridge (9)    |
| 5 An ON amateur (1,7)                       | 19 Possible answer to a pile-up (3,5) |
| 6 SSB transmitter alignment aid (3,3,4)     | 22 SU (5)                             |
| 7 Coils (9)                                 | 23 Modified Colpitts (5)              |
| 8 Ravine (5)                                | 25 Senior (5)                         |
| 9 Language of all Amateur transmissions (5) | 28 Automatic test equipment (1 1 1)   |

# BLOW UP BLOW UP BLOW UP

*Lost your negatives?*

*Want to blow up  
your photos?*

*Don't know how  
to get it done?*

*Well help is  
not far away.*

*If you bring us  
your COLOUR*

*or*

*old B&W photographs  
we can ENLARGE*

*it to A4 size*

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*and LAMINATE*

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& Enlarging up to A3  
(Negatives not Required).*

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*\* Fax Service.*

*\* Personalised Calendars*

*\* Secretarial Service*

*\* Colour and B & W*

*Overhead Transparencies.*

*\* Spiral Binding*

## *PHOTOART*

### *MAGIC*

155 SLADEN ST. CRANBOURNE 3977

Phone: (059) 96 7411

Mobile: 015 314 051

Fax: (059) 95 2238

Glpsland Gate Radio & Electronics Club Inc. (GGREC) General Meeting 19 May 1995

**Meeting Commenced** 20:25 EAST

**Chairman:** Albert Hubbard, VK3BQO.

**Minuter Taker:** David Campbell, VK3XMF.

**Present:** As per attendance sheet.

**Visitors:** Jim Kelly

**Apologies:** Dianne Jackson, VK3XDR, VK3XLE, VK3TMF.

**Correspondence:** WANSARC, FAMPARC, AR, EMDRC, SERG, Dept. Justice re financial statements, Letter of thanks from Girl Guides.

**Treasurers Report:**

Read: Ian Jackson VK3BUF Moved: Paul Ash Sec: Reg Goddard VK3VRG Carried: YES  
Income: \$703.00 Expenditure: 327.23 Balance: \$6133.77

**Previous Minutes:** Circulated in Monthly Magazine.

Read: VK3XMF Moved: VK3VRG Sec: Ivan Blezard VK3ARV Carried: YES

**New Call Signs:** Nil

**Business Arising from Previous Minutes:**

**Max Hill:** Max VK3TMK is recuperating from a serious car accident in the Rehabilitation unit at Glen Waverly and welcomes visitors and phone calls on Tel. 566 2838.

**Landfree Kit:** The circuit boards have arrived. Members agreed that the club would purchase the parts on their behalf.

**Post Office Box:** Mail is presently being redirected from the clubs Dandenong PO Box to VK3BQO's Cranbourne PO Box.

**Drink Cooler:** A quantity of these club logo endorsed coolers will be purchased at \$5.00 each by the club for sale to its members.

**Magazine Storage:** Paul Ash has purchased and brought along a second hand three door cupboard tonight for installed at the coming working bee.

**General Business:**

**Prac Nights:** An instructional talk regarding Resistors will be given in the first of a series at the next Prac. night on 2 June.

**Prize:** Tonight's prize is a dual fluro flash lamp.

**Working Bee:** This will be held on Sunday 28 May. Jobs required to be done are repair of the HF antenna, installation of the storage cupboard, further fitting out of the rack, and minor repairs to the hall and its grounds.

**Social Night:** To be held at the Baxter Tavern on 26 May. VK3BQO will book for 15 people.

**Annual Dinner:** This is to be held at the meeting hall on 1 July with members bringing a course to be shared. VK3BQO will confirm this date with the Girl Guides.

**Outing:** A trip has been planned to the Science Works for 18 June. This will cost adults \$8, children \$4 according to VK3DHI.

**White Elephant:** A tentative date of 16 September has been set aside for this event.

**JOTA:** On 21 and 22 October VK3ARV and VK3VRG will co-ordinate the event for the club at the Girl Guide hall.

**2 Meter Interference:** VK3BUF traced interference from the ABC transmitter tower on Mt Dandenong recently. He contacted the SMA who a few days later confirmed that it was pager transmissions causing problems and that they have since had them fixed.

**QSL Cards:** VK3ARV reported problems with the onforwarding of cards from the WIA to QSL Managers. He suggested that members send a note of current registration to them every six to twelve months.

**Change of Bank Accounts:** Ian Jackson VK3BUF proposed that the GGREC change its general cheque account from the Advantage Credit Union to the Commonwealth Bank. Also that this new account is to be a cheque account for Non Profit organisations where any two of three signatories may endorse cheques. And the signatories are to be the President - Albert Hubbard VK3BQO, Treasurer Ian Jackson - VK3BUF, Secretary David Campbell - VK3XMF. This was seconded by Helmut Inhoven VK3DHI and the voted was carried in the affirmative.

**Investment Account:** VK3BUF reported that the \$2,500.00 investment account is due to mature in January 1996. Members will be given reinvestment options at the November 1995 meeting.

**Guest Speaker:** Stuart Wilson the subject of The Internet.

**Next Meeting:** 16 June 1995

**Meeting Closed:** 21:15 EAST