Please note, in particular, the AOB on the reverse side of this notice THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Thursday 29th November 2001 7:15 for 7:45

The Statistical Laboratory, Centre for Mathematical Sciences, Wilberforce Road, Cambridge

Olfactometry: or The Penrith Pong, EPA 1990 and Reasonable Doubt

Ted Harding

Ely, Cambridgeshire

Abstract: The scene: A meat rendering plant near Penrith in Cumbria.

<u>The context</u>: Attempts by Eden District Council to impose conditions of operation under the Environment Protection Act 1990, involving the measurement of odour by Olfactometry, and the ensuing Public Enquiry which dragged on for years.

<u>The issue:</u> Breach of a condition under EPA-90 is a criminal offence. When this has a numerical expression, it is on all fours with Driving with Excess Alcohol. What comparable standards of proof can be obtained for environmental pollution? What is the value of Olfactometry for this purpose?

Some general issues: What is the statistical version of "Beyond reasonable Doubt"? Is EPA-90 enforceable?

Speaker: First job (1958-1964): Ballistics and missile guidance systems at War Office/MOD, during which being faced with trials results (of firing armour-piercing shot at armour plate) got me puzzled about Statistics. This led to a year's study at I.C. under George Barnard, followed by Aberdeen (1965-66) and Edinburgh (1966-69) Depts of Statistics, then Cambridge University Statistical Laboratory (1969-88) during which I became a very early member of the Statistics Discussion Group. From 1988-2001 I was attached to UMIST (Manchester) Dept of Mathematics, mainly doing a variety of statistical consultancy. Since April 2001, a denizen of the Fens and doing part-time consultancy with the Animal Health Trust near Newmarket.

Directions: The main entrance is reached from Clarkson Road by going along the footpath to the right of the Newton Institute, and turning left throught the gatehouse towards the main building (Pavilion A), which has a glass front and a curved grassed roof. The main entrance is in the middle of the glass front. Coffee before the talk will be in the common room in Pavilion D, and the talk will be in Meeting Room 4 in Pavilion A. Free Parking is available after 5pm on Clarkson and Wilberforce Roads.

Next Meetings: (2002)

7th February – Ian MacPherson (PRISM Training & Consultancy Ltd) on 'Exploiting Biological Potential'.
7th March – James Wood (Animal Health Trust) on 'Multilevel modelling of racecourse fatalities: the younger the safer.' **Supper:** Some members eat before a talk at the University Centre meeting in the downstairs bar at 6pm. All welcome! **Subscriptions:** of 4 pounds per member are now due for the 2000-2001 session. Cheques should be made payable to Robert Milroy and may be posted to the secretary at the address below.

Secretary: Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 2EF; telephone 01223 355294 Extension 722; E-mail peter.watson@mrc-cbu.cam.ac.uk

Approved Minutes of Annual General Meeting 1999-2000

The Annual General Meeting for the year 1999-2000 was held at the Computer Laboratory, New Museums Site, Cambridge on 5th October 2000. Present: Eryl Shirley(in chair), Tim Cole, Chris Corbett, Mary Garratt, Mark Hill, Tony Johnson, Julie Jones, Rob Milroy, Clive Moncrieff, Pamela Morris, Alistair Murray, Karen Ooms, Haidee Philpott, Goerge Quartey, Lisa Robertson, Susan Talbot, Peter Treasure, Peter Watson. Apologies: Margaret Corbett, Anthony Edwards, Tim Sparks, Helen Tate. The **minutes** of the previous A.G.M. were approved.

Reports: The **Treasurer's** Accounts were presented. It was agreed to keep subscriptions at £4. The **Secretary** reported median attendance (13) was up on last year.

Election of officers and committee: Peter Treasure proposed Dave Andrews as chair to replace Eryl Shirley and Margaret Corbett as an ordinary member replacing June Anderson. Both were elected unopposed. Many thanks to Eryl for her sparkling presence.

The committee for 2000-2001: *chair* Dave Andrews; *secretary* Peter Watson; *treasurer* Rob Milroy; *exofficio* Eryl Shirley; *ordinary* Margaret Corbett, Tim Sparks, Helen Tate. **Any Other Business:** None

Treasurer's Accounts and Report 2000-2001

Expenditure	2000-01	1999-00	Income	2000-01	1999-00
Secretarial expenses	£69.39	£65.70	Initial cash balance	£154.44	£144.62
Speakers' expenses	£25.15	£21.29	Subscriptions (No. of people)	£120.00 (30)	£120.00 (30)
Refreshments	£6.06	£25.45	(recorded)	(50)	(50)
Balance c/f	£176.64	£154.44	Interest	£2.80	£2.26
Totals	£277.24	£266.88		£277.24	£266.88

Treasurer's Report: Thanks to everyone who either hosted, spoke or attended meetings in the last session. After another solid year, financially, it would appear prudent to keep the subscription at £4.

Draft Minutes of Annual General Meeting 2000-2001

The Annual General Meeting for the year 2000-2001 was held at the Cognition and Brain Sciences Unit, Chaucer Road, Cambridge on 8th October 2001. Present: Dave Andrews(in chair), Tim Auton, Luisa Bernardinelli, John Dickens, Mary Garratt, Sarah Godward, Ted Harding, Neil Hawkins, Mark Hill, Donna Jefferies, Tony Johnson, Krys Kelly, Rob Milroy, Pamela Morris, Ian Nimmo-Smith, Karen Ooms, Gill Price, Lisa Robertson, Peter Rothery, Tim Sparks, Mike Streather, Susan Talbot, Simon Thompson, Peter Treasure, Sarah Vowler, Peter Watson, Graham Wetherill. Apologies: Margaret Corbett, Helen Tate, Nicola Wright. The **minutes** of the previous A.G.M. were approved. **Reports:** The **Treasurer's** Accounts were presented. It was agreed to keep subscriptions at £4. The **Secretary** reported median (12) and total attendance (97) were consistent with previous years. **Election of officers and committee:** The committee were re-elected unopposed. The committee for 2001-2002: *chair* Dave Andrews; *secretary* Peter Watson; *treasurer* Rob Milroy; *officio* Eryl Shirley; *ordinary* Margaret Corbett, Tim Sparks, Helen Tate.

Any Other Business: It was agreed that any members on the postal list who don't mind being emailed their notices instead should please contact the secretary.