

ARTICLES, REVIEWS and other PAPERS

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<http://contentdm.warwick.ac.uk/cdm/ref/collection/leo/id/263>
<http://www2.warwick.ac.uk/services/library/mrc/explorefurther/images/pioneers/> files as item MSS.363/S4/12 and at the University of Manchester John Rylands Library, <http://archives.li.man.ac.uk/ead/html/gb133nahc-leo-p1.shtml>, filed as item C130. Appendix 13 in Peter Bird's book LEO: The First Business Computer is extracted from the guide.
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[//www.dropbox.com/s/08ap89c8n26oxjs/J%20Caldwell%20Report%20Automatic%20Programming%20Conference%201962.docx?dl=0](https://www.dropbox.com/s/08ap89c8n26oxjs/J%20Caldwell%20Report%20Automatic%20Programming%20Conference%201962.docx?dl=0)
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- ✦ Caminer, H., (Editor), Behr, B., (Production), (2019). **LEO Matters, LEO Computers Society, Vol 6, Autumn**. The issue includes articles by Peter Byford, Lisa McGerty, Jude Brimmer, John Daines, Tony Morgan, Frank Land, Neil Lamming, Lex Korngold, John Hoey Peter Hermon, John Aeberhard Carole Hyman and Neville Lyons. LEO Matters can be downloaded from the LEO Computers website.
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simply click on the document front page or contents item . If you do wish to make a comment without logging in please just reply to this email. as we would really like any feedback , ideas for topics for upcoming issues or ,indeed, any views that you may have on LEO coverage. [To go to the Post Click Here](#)

- ✦ Caminer, H., (Editor), Behr, B., (Production), (2021), **Leo Matters**, , Leo Computers Society Vol. 9, Spring 2021, pp. 1-16. This Issue - Index 1. Message from our Chairman Peter Byford, pp. 1 -2. Letter from HM Queen Editor pp. 2-3. Special Visit to Cadby Hall Neville Lyons pp. 3-4. NHLF Project Update Lisa McGerty, pp. 4-5. Zoom, Zoom, Zoom Hilary Caminer, pp. 5-6. Braille Computing Tom Brooks pp. 6-7. Sporting and Social Side Peter Byford p. 8. My Rugby Days Fred Whittaker pp. 9-10. LEO Bridge Teams Tom Brooks, Mike Lawson Dave Alerton p.10. LEO Strikes Oil Mike Hancock p.11. LEO Master Routine Michael Guy p.12. Our Latest Trustee Philip Cleary p.13. (Editor: Can anyone identify people on photos? p.14.) Dates for your diaries p.15.

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- Cox, G., **Business computing 2001-the state of the art**, pp 285-294
- Mowery, D., **50 Years of business computing: LEO to Linux**, pp 295-308
- Yapp, C., **Conference sponsors' panel: what have we learnt in 50 years?** pp 309-320
- Shirley, S., **Panel: social and economic consequences of business computing and public policy**, pp 321-330
- Ashworth, J.M., **Knowledge and digital information**, pp 331-337
- Hudson, R., **Panel: crystal ball, 2001-2051**, pp 339-353
- Ein-Dor, P., **The world and business computing in 2051: from LEO to RUR?** pp 357-371
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- ✦ 2017

✦ **October 3rd-7th:** paper presented at 4th Conference on the History and Philosophy of Computing in Brno, Czech Republic.
<http://ta.mdx.ac.uk/leo/coping-with-the-american-giants/>

✦ **October 11th:** presentation about Validity and Correctness in LEO I and II at the Alan Turing Institute.
<https://www.eventbrite.com/e/history-and-philosophy-of-programming-meeting-tickets-37255156175?>

✦ **October 20th,** presentation of paper about LEO at PROGRAMme: roundtable CNAM - Conservatoire national des arts et métiers, Paris
<http://ta.mdx.ac.uk/leo/validity-and-correctness-in-leo-i-and-ii/>

✦ 2018

✦ **May 16th, 2018:** Seminaire HEPI: University of Lille, on the history and philosophy of computing.

I presented a talk “From Academia to Business: LEO computers and Olivetti.” Two case studies in the early European Computer Industry”. The other lecturer of the seminar was Pierre Mounier-Kuhn.

<https://calcul.hypotheses.org/435#more-435>

✦ 2019

✦ **21 February, 2019 Computer Conservation Society seminar**

✦ *Olivetti and the early Italian computers*

✦ <http://www.computerconservationsociety.org/lectures/2018-19/20190221.htm>

✦ EM is going to Lille tomorrow for a seminar. Her paper may be seen here: <https://programme.hypotheses.org/spring-workshop-i-machines> . It is part of a 4 year planned programme and will be published in 2022.

✦

2021

4 February 2021 Talk on LEO at the Conservatoire Nationale des Arts et Materiels (CNAM) in Paris. 2.5 hour workshop conducted with a French historian. ‘Les Debuts de l’Informatique de gestion en Italie et Angleterre.’

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programmer, including photos of LEO artefacts.

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- ✦ Pelling, N. (2002) **The Case For The First Business Computer**, <http://www.nickpelling.com/Leo1.html> The business cases behind the five proposals made to the board of J. Lyons & Co. by Thompson and Standingford in 1947 - which led to the construction of the first business computer - are analysed, but found to be strategically lacking. Both an alternate reading of the case and some contemporary implications are then developed.

✦ Pearcey, T. (1948), Australian Journal of Science, February

✦ Pearcey wrote;

✦ In the non-mathematical field there is wide scope for the use of the techniques in such things as filing systems. It is not inconceivable that an automatic encyclopaedic service operated through the national teleprinter or telephone system, will one day exist."

✦ The article by Pearcey who may be honoured as father of Australian computing may be considered prescient much as the LEO project at that time.

✦ Pinkerton, J.M.M., (1949), **Use of EDSAC on the Wages Problem**, manuscript typescript of a paper prepared by John Pinkerton with the help of Derek Hemy one month after John joined Lyons. The paper attempts to provide an analysis of how long it would take to prepare a payslip under various assumptions about input/facilities. A copy of the transcribed document is held in Dropbox in Word and PDP format.

https://www.dropbox.com/s/hr062jv7rnabnh1/John%20Pinkerton%20EDSAC%20payroll%20paper_1949.docx?dl=0

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✦ Pinkerton, J.M.M., (1951), **A Short Description of the EDSAC Type Calculator Circuits used in LEO**, Copy No 1' of a 63 page report on the LEO computer for J Lyons & Company Ltd. including text and 'small block schematic diagrams' for submission to the Patent Office. The report has the handwritten and stamped mark '88147 Presented 27 July 1951' as well as being stamped 'Patent Office Library, 27 July 1951'. Listed in the report and included with it are 65 larger diagrams all stamped 'Patent Office Library, 27 July 1951'. BL Explore Archives and Manuscripts catalogue. The catalogue number is **Add MS 89294**
http://searcharchives.bl.uk/IAMS_VU2:IAMS032-003391654

✦ Pinkerton, J.M.M. (1952) **Patent**

Application: GB000000767192A 29.05.1952 30.01.1957 JOHN MAURICE MCLEAN PINKERTON; LYONS & CO LTD J

Improvements in and relating to data transfer apparatus. Complete Specification published January 1957. See

https://worldwide.espacenet.com/publicationDetails/originalDocument?CC=GB&NR=767192A&KC=A&FT=D&ND=4&date=19570130&DB=EPODOC&locale=en_EP#

✦ Pinkerton, J.M.M. (1954) **Operating and Engineering Experience Gained with LEO**, in **Automatic Digital Computing**, Proceedings of a Symposium held at National Physical Laboratory, March 1953, pp. 21-30, published by HMSO. Key points from the article include:

- in building the "calculator" (i.e. LEO) Lyons' intention was to get it into operation as quickly as possible because they felt that until it had actually been in use over a period of time for clerical purposes, "the optimum form of such equipment could not be decided".

- **Pinkerton states that modifications and "additional features" were required to the EDSAC design that the LEO is based on "to make the installation effective on clerical work" and that this included a "larger store, means for introducing data into and extracting results from the calculator much faster than was possible with the EDSAC, and a foolproof method of checking data recorded to the machine".**

- Pinkerton suggests that although LEO has been in use for over 18 months, it is "not yet as reliable as would be necessary for carrying out a regular and intensive programme of clerical work". http://www.chilton-computing.org.uk/acl/pdfs/Automatic_Digital_Computation_Symposium_Mar53_text.pdf

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✚ Pinkerton, J.M.M. (1959) **Features of the LEO IIC Computer**, Automatic Data Processing, December.

✚ Pinkerton, J.M.M. (1961) 'The Evolution of Design in a Series of Computers', The Computer Journal, British Computer Society, Vol. 4, No. 1, pp. 42-46.

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✚ Pinkerton, J.M.M. (1974) 'Performance Problems with LEO I', Presented at the Colloquium on the 25th Anniversary of the Stored Program Computer, held at the Royal Society, London, on 12th November 1974

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<file:///C:/Users/Dell/AppData/Local/Microsoft/Windows/Temporary%20Internet%20Files/Content.Outlook/CVA422EG/Waitrose%20News%20Thomas%20Harding.pdf>

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✚ In 1947, J. Lyons and Company, Britain's leading catering firm, sent two senior managers to the USA to investigate American systems of office management. Their bald conclusion was that established practice could teach them nothing: 'We did not find any firm which has developed on so broad a front as Lyons, most offices only having tackled a limited number of office problems without having surveyed the whole field'. Physical layouts – notably including that of the Pentagon – were poor, and development plans conservative, tending blindly to ignore the potential of rapid electronic processing. Far more exciting was the extensive American work on digital computing, but this was still largely uncommercialised.¹¹ Learning that there were British efforts in the same direction, the Lyons managers fostered a partnership with researchers at the University of Cambridge to develop the Lyons Electronic Office (LEO), which automated the bulk of the firm's payroll, stock control and valuation tasks across 1951–54, placing it at the forefront of international developments in this field. Lyons then formed a subsidiary to market LEO equipment to other businesses, stressing its business context as a unique guarantee of user-focused design.¹²

✚ A similar story played out in parallel at Ferranti, the commercial electrical and defence contracting group, which in 1948 sent a representative, Dietrich Prinz, to the USA to assess the state of the art in digital computing. Prinz's American hosts, according to company legend, wondered 'why he had come there, since the most advanced work was being done on Ferranti's doorstep at Manchester University', where the cathode ray tube storage system had become the basis for a prototype computer.



✚ Sylvan, A.C. (2007), editor, **Mr. Thomas Raymond Thompson: Bio/Description**, IT History Society, a compilation of biographical information and recollections of TRT

from a number of sources including Peter Bird, Frank Land and Ralph Land.
<http://www.ithistory.org/honor-roll/mr-thomas-raymond-thompson> and in Dropbox at
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