J.P.V.MADSEN NEW ZEALAND PRESS ARTICLES 1920-1960.

Prepared by: R W Madsen May 2022.

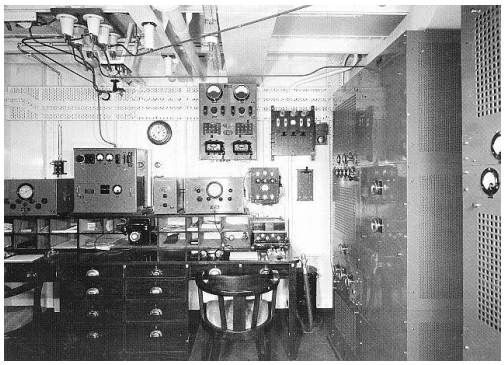
INTRODUCTION.

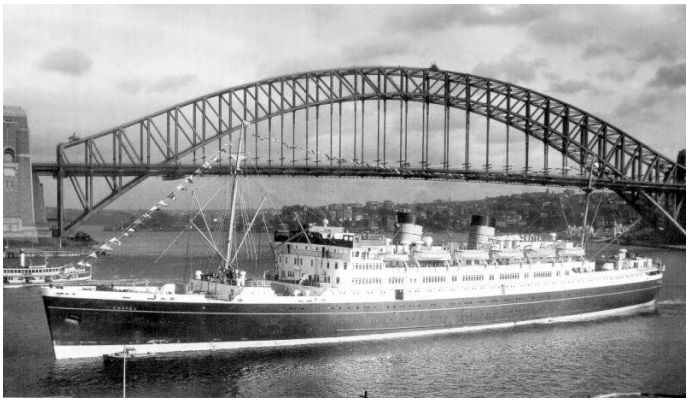
The digitized files of NZ newspapers between 1839 & 1971 can be accessed by the "Papers Past" web site & in the case of JPVM, searching between 1910-1971 was done using keywords "J P Madsen", "John Madsen", "Dr Madsen", "J P V Madsen"& "Sir John Madsen" to obtain some 40 Press articles (but not counting syndicated articles).

An outstanding feature of these news items are those in 1937 relating to the 23rd A.N.Z.A.A.S meeting held in Auckland in which JPVM was President of the Maths-Physics-Astronomy Section out of which came a concerted proposal to the NZ Government to fund a NZ Radio Research Board on the same lines as the Australian Radio Research Board which had been operating successfully for the previous 7 years. In 1943 JPVM carried out a survey of the Engineering School at Canterbury College University in Christchurch making recommendations which were adopted to emphasise training & research in electronics.

The following are summaries to include the more important topics mentioned in each article which can be readily accessed in "Papers Past" using the 1st few words of the article heading & the reported date. The New Zealand Herald & PRESS sources account for approximately 50% of the article sources.

The SS AWATEA (Maori "Eye of the Dawn") [1936-1942] which carried the ANZAAS delegates to NZ in January 1937 in 2.5 days was a superbly appointed vessel (14,000 tons, 23 knots built by Vickers) which could carry 302 passengers in 1st & Tourist class. The radio room is shown.





1. **Sydney University.**
   (New Zealand Herald, 19 August 1920).

   Dr J P V Madsen has been appointed to the Chair of Electrical Engineering. The Chair is newly created & the appointee is a local man.
2. **New Australian Policy-Programmes by Contract.**

   (New Zealand Herald, 2 August 1928).

   The Prime Minister, Mr Bruce in Canberra announced the Commonwealth's new broadcasting policy whereby the Government is to be the owner of the plant, equipment &

mechanical means of broadcasting of all A Class stations & relays. Contracts will be let for 3 year terms for the supply of programmes to the whole of Australia. The Post Master General would be assisted in controlling the new policy by an honorary committee including Professor J P V Madsen, professor of Electrical Engineering at the University of Sydney.

3. **Geophysical Survey-method criticized-Geologist on oil prospecting.**(Poverty Bay Herald, 4 September 1928) (Canberra August 20).

   The Conference decided, on the recommendation of Professor Madsen (Sydney) to urge the executive council of the expedition to include the seismic method in its work where the electrical method failed.

4. **Wireless waves-Method of preparation.**
   (Hawkes Bay Tribune, 6 November 1929).

   Signals have been received which have travelled at least twice round the Earth said Professor Madsen recently in a Lecture on "Production of wireless waves and their method of propagation" which he delivered under the auspices of the Royal Society of New South Wales. Professor Madsen went on to say these electromagnetic vibrations were very similar to the vibrations which affected the eye, namely light, which travelled in a straight line. In order for the electromagnetic vibrations to travel round the large curvature of the Earth something equivalent to a reflector must be provided by the upper atmosphere up to 20 miles from the Earth's surface which had been observed by means of sounding balloons.

5. **Untitled. [L.G.H Huxley & G.H. Munro].**
   (Otago Daily Times, 12 February 1930).

   Dr L G H Huxley who has arrived in Sydney from London hopes, with the aid of a direction finder, he can facilitate weather forecasts materially. Mr G H Munro will do similar research work in Melbourne. Dr Huxley will work on behalf of the Commonwealth Scientific & Industrial Research (CSIR) under the direction of Professor Madsen.

6. **Weather and radio-Experiments in Sydney-Important Discoveries-Assistance in forecasts.**

   (New Zealand Herald, 16 September 1935).

   Better knowledge of the causes of weather conditions and a greater ability to forecast accurately are possible as a result of discoveries made recently by the Electrical Engineering School, Sydney University on behalf of the Radio Research Board. Professor J P Madsen director of research at the School stated that a remarkably close connection had been found between the electrical condition of the Heaviside Layer and weather conditions on the ground.

   A theory, in collaboration with Professor Bailey, to explain the interference caused by the overlapping of high power, long wave broadcasting stations had been put forward to explain this "Luxembourg Effect" & was now generally accepted.

   Professor Madsen explained that one of the earliest results obtained by research concerned Professor Appleton's theory that the Earth's magnetism profoundly effected radio waves

while they were being reflected by the Heaviside Layer. In the case of England in the Northern Hemisphere the waves come down twisted like a corkscrew with a left hand spiral-measurements at Jervis Bay showed that the prediction of a right hand spiral in the Southern Hemisphere was correct.

7. Science Congress-First Dominion Meeting-Appointment of Officers.

(Auckland Star, 3 July 1936).

The 23rd ANZAAS gathering is to be held in Auckland in January next year. Lord Gowrie (Gov General Australia) & Lord Galway (Gov General NZ) are patrons & the President is Sir Douglas Mawson & the President-Elect is Sir David Rivett of CSIR. The Presidents of the Sections are listed with Professor J P V Madsen of Sydney University the President of the Mathematics & Physics Section.

8. Advancement of Science-Distinguished persons to be present.

(PRESS, 18 September 1936).

ANZAAS has been in existence for about 48 years & has visited NZ 3 times with meetings every 2 years & have been held in Christchurch, Wellington & Dunedin. Among the Sectional Presidents who will be present are Dr Madsen (whose address will be upon some subjects connected with the ionization layers in the upper atmosphere).

9. Scientists coming-Biennial Congress at Auckland-Distinguished visitors.

(Wanganui Chronicle, 16 January 1937).

More than 200 Australian members of ANZAAS arrived at Auckland yesterday by the Awatea from Sydney for the biennial meeting to be held in Auckland from January 12 to 19. A large attendance is expected at the conference with NZ membership standing at 500.

Among the 16 Presidents of Sections is Professor J P Madsen, Professor Electrical Engineering, Sydney University, a leading authority on wireless.

10. Science Congress-Important Visitors-Some distinguished men-Arrival next Monday-Many fields of research.

(New Zealand Herald, 7 January 1937)

Same article as 9. Above.

11. Australian party -Passengers by Awatea.

(Auckland Star, 9 January 1937).

Passengers include Dr. J P V Madsen (University of Sydney), Miss P M Madsen (daughter 1908-1983).

12. Sherry Party-President entertains-Welcome to Science members.

(Auckland Star, 14 January 1937).

Sir Carrick & Lady Robertson entertained a number of guests at a late afternoon sherry party yesterday to welcome some of the visiting scientists & a number of well known Auckland citizens. Guests included Sir Douglas Mawson & Miss Mawson and Professor J P V Madsen & Miss Madsen.

13. Down to work-Science Congress-Interesting addresses-Many subjects.

(Evening Post, 14 January 1937).

"Remarkable advances have been made in the last 10 years in our knowledge of the state of the Earth's atmosphere by the study of wireless waves reflected in the ionosphere" said Professor J P Madsen, professor of Electrical Engineering at the University of Sydney in the course of his Presidential address to the Mathematics & Physics Section. "It is because of this reflection that we can hear radio transmissions from the other side of the globe".

14. Radio Progress-Value of research-Work done in Australia-Dominion co-operation urged-Government Assistance.

(New Zealand Herald, 13 January 1937).

Yesterday at the Science Congress Professor J P V Madsen (President of Maths, Physics, Astronomy Section) stressed the great importance of radio research to New Zealand & the need for co-operation between the Dominion & Australia on the subject. It is not safe at all in this subject, he said, to rely on the work of investigators in other parts of the world as has been done in many other spheres. Information already obtained in Australia showed conditions in the Southern Hemisphere vary in many respects from those in the North, so that reliance on results from the other side of the world could be very misleading.

External & internal communication, meteorology & aviation were directions of vital importance to Australia & NZ in which radio research had a role. The RRB in Australia for the last 7 years had funding of around 5,000 pounds per annum.

15. Radio Research-NZ help needed-Big field to explore-Eminent workers here.

(Auckland Star, 13 January 1937).

As per 14. Above reported as an urgent need.

16. **Radio Research.**

(New Zealand Herald, 13 January 1937).

The observations of Professor J P V Madsen of Sydney, upon the need for co-operation between Australia & New Zealand in radio research are sufficiently impressive to the lay mind to justify attention by the Government. It is self evident that in this branch of science Dominion investigators should be provided with the means of collaborating for mutual benefit. What has been done by the amateur investigator is not forgotten or under estimated, but the study ought to be organized more comprehensively in the most qualified quarters.

17. **Wireless Researches- Ionisation in the Atmosphere.**

(Poverty Bay Herald, 15 January 1937)

Professor J P V Madsen in his Presidential address said. "Layers in the atmosphere become highly ionized by the action of ultra violet radiation from the Sun & it has been found possible to determine, by means of wireless waves, the amount of this ionization". Marked daily changes in the ionosphere had been noted as well as seasonal variations, while there appeared to be a correlation with the state of solar activity, as revealed by the sunspots.

18. **Radio in NZ-Research mooted-Establishment of a Board-Science Congress proposal.**

(Auckland Star, 19 January 1937)

At the final Auckland meeting of ANZAAS the General Council adopted a resolution from the Mathematics, Physics & Astronomy Section urging the immediate establishment of a Radio Research Board in New Zealand similar to Australia & elsewhere. The objects of the Board are to effect closer co-ordination of radio research work in New Zealand, establish liaison of similar organisations in other parts of the Empire, particularly Australia & to promote the development of radio research in its scientific aspects in NZ with special reference to local geographical & meteorological factors.

The personnel of the Committee to be set up are: Professor J P V Madsen (University of Sydney), Professor T H Laby (Melbourne), Professor P W Burbidge (Physics, Auckland), Prof. F W G White (newly appointed to NZ), Dr E Marsden (DSIR Secretary). Also Mr E H Green (Wellington), Dr M A E Barnett, Dr D Brown (Auckland).

19. **Radio today-Is Television practicable in New Zealand.**

(Hutt News, 27 January 1937)

An article considering the idea of New Zealand designed & manufactured receivers, better suited to NZ conditions & likely to give more years of satisfactory & trouble free life. The reference to Professor J P V Madsen was from his recent Presidential address in which he said that reliance on results from the other side of the world could be very misleading.

20. **Radio Research-Plan for Dominion-Special Board proposed-Manifold advantages-Co-operation with Australia.**

(New Zealand Herald, 20 January 1937).

The ANZAAS plan for a NZ Radio Research Board was placed before Hon. D G Sullivan the Minister in charge of DSIR who undertook to present the recommendation to the Government. It was apparent that the need for effective communications in times of crisis was best met by development in times of peace, only in this way could suitable personnel & equipment be available in emergency.

It was recommended that the NZ Board consist of Prof. J Shelley as Chairman, Prof P W Burbidge & F W G White professors of Physics at Auckland & Canterbury University Colleges & Dr M A F Barnett as Secretary.

The research scheme for NZ is enthousiastically advocated by Professor J P Madsen, who said yesterday that the plan offered such manifold & immediate benefits to radio , telegraphy, broadcasting, aviation, defence & meteorology in both NZ & Australia that the proposed expenditure would be more than justified.

21. **Computing Machine.**

(Bay of Plenty Times, 12 November 1937)

[Also: Wonder Machine-Great time saver-Mathematical problems-Australian's invention.]

(Auckland Star, 22 July 1937)

At Sydney University a young physicist, D M Myers, on the Radio Research Board has invented a machine of similar pattern to those built in Europe & in the United States which by tracing curves on a sheet of paper reduces to a brief time the solution of complicated mathematical problems that could take a long period of weeks by ordinary methods.

J P V Madsen, professor of Electrical Engineering at the University explained the principle of the machine, illustrating its uses by a practical problem of how to protect an electrical system, either of wiring or of machinery against lightning. Currents from lightning can be deduced & automatic circuit breakers can then be set to safeguard the system.

22. Pacific Air Service.

(Auckland Star, 1 May 1941)

Pan American Airways Honolulu Clipper will leave on her return flight to San Francisco tomorrow at 8.00 am. A passenger is Professor J P Madsen.

23. Personal.

(Waikato Times, 1 May 1941)

Professor J P Madsen, professor of Electrical Engineering at Sydney University, & now Director of Scientific Research Liaison in which New Zealand is co-operating with Australia, Britain, Canada & America, will leave Auckland for America by air tomorrow.

24. Clipper arrives-Uneventful journey-Passengers total 28.

(New Zealand Herald, 1 May 1941).

The Clipper will leave at 8.30 am tomorrow for San Francisco with 11 passengers including Professor J P Madsen.

With 28 passengers as well as mail & freight, the Honolulu Clipper reached Auckland yesterday afternoon after a normal trip. Captain R H McGlohn was in command, his passengers most of whom are bound for destinations beyond NZ, included 4 small children.

25. Radio Research in Australia.

(PRESS, 5 July 1941)

Radiophysical research with devices of a secret nature is being carried out in Australia, in collaboration with Great Britain. The Minister, Mr Holt revealed this in the House of Representatives recently. He said the work included radio location & that the Board comprised Sir John Madsen (Chairman), the Chiefs of Staff, the Chief Executive Officer of CSIR & the Director General of Posts & Telegraphs.

26. Personal.

(Auckland Star, 4 December 1941).

Professor Sir John Madsen, Professor of Electrical Engineering at Sydney University who was knighted in the King's Birthday Honours list last June, will arrive at Auckland by the Pacific Clipper due on Monday.

27. Clipper Leaves-Due here on Monday.

(New Zealand Herald, 4 December 1941).

The Pacific Clipper which left San Francisco early yesterday morning is due at Auckland on Monday. Passengers for Auckland from San Francisco & Los Angeles are Sir John Madsen (& 9 others).

28. Fire Proofing Liquid- American experiments.

(New Zealand Herald, 12 July 1941) [New York report 7 July].

Sir John Madsen (Sydney University) who is one of a group of 5 Australian scientists who will establish headquarters in the United States & England in connection with the war effort, has been invited to attend a demonstration of a new fire-proofing liquid which the United States Navy & War Departments are investigating. Australian officials in the U S are taking a keen interest in the

material which is said to have very high military advantages & aeroplane fabric treated with it will not burn & other uses (dowsing thermite bombs).

(Note: JPVM was in London in July 1941 & probably George Munro in Washington would have attended the demonstration).

29. Science and War- Australian Professor.

(New Zealand Herald, 9 December 1941).

After visiting Britain in connection with scientific aspects of warfare, Sir John Madsen arrived by the Pacific Clipper yesterday. Sir John who is now Director of Scientific Liaison in Australia, is at the Grand Hotel & will later continue his journey to Sydney. In view of the secret nature of his work Sir John declined to comment on the details of his trip abroad. He was met on arrival by Dr E Marsden of Wellington, Director of DSIR.

30. The Pacific Clipper-Arrival this afternoon.

(New Zealand Herald, 8 December 1941).

The Pacific Clipper which arrived at Noumea at two o'çlock yesterday afternoon from Suva, is due at Auckland this afternoon. Passengers for Auckland from San Francisco, Los Angeles, Honolulu & Suva are: Sir John Madsen (& 18 others).

31. Visit of Noted Scientist-Sir John madsen in City-Survey of School of Engineering.

(PRESS, 7 May 1943.

One of Australia's most eminent scientists, Professor Sir John Madsen arrived at Christchurch yesterday to begin a fortnights survey of the School of Engineering at Canterbury University College. The investigation will in the first instance be of a general nature but it is likely that developments along modern lines, particularly in the electrical field, which is Sir John Madsen's special department, will be discussed & these may be the subject of later recommendations.

Last evening Sir John Madsen was entertained at the home of Mr A E Flower, Chairman of the Canterbury University College Council, where he met members of the Council, the Professorial Board & others. This afternoon he will attend the capping ceremony. Mr Flower said we have been very fortunate in being able to commission Sir John Madsen for this work.

32. Famous Canterbury Scientists-Sir John Madsen's tribute.

(PRESS, 8 May 1943).

"Lord Rutherford would be delighted at the way in which you intend to commemorate his work by establishing a scholarship for research, for what is the function of a university but to stimulate research and enquiry, especially in the method of thought?!" Sir John Madsen said he recalled with gratitude the helpfulness of Lord Rutherford. Australia had benefitted by the influence he had exerted in his particular branch of science.

Sir George Julius & Dr Coleridge Farr were other NZ scientists to whom Sir John Madsen paid tribute. He mentioned that Professor F W G White was at present doing special work "of the greatest importance to Australia".

33. Personal.

(PRESS, 20 May 1943).

Sir John Madsen, Professor of Electrical Engineering, Sydney University, left Christchurch by air for Auckland yesterday.

34. Personal.

(Manuwatu Standard, 27 May 1943).

A distinguished visitor to Palmerston North at the weekend was Sir John Madsen, Professor of Electrical Engineering, Sydney University who is now devoting most of his time to Government war work. Sir John who was the guest of Mr A G Lawson of Langston Ave is best known as the inventor of the radio locator. His visit to NZ was for the purpose of reconstructing the Engineering branch of the Canterbury College, in addition to making enquiries on war work.

35. Electronic Devices-Future Value Forecast.

(Nelson Evening Mail, 1 June 1943)

In an address to the Wellington branch of the NZ Society of Engineers on the subject of "Engineering Education" Sir John Madsen BE. BSc. DSc stressed that the value of electronic devices in the future could not be over estimated. He said that the science of electronics & electrical communication had advanced tremendously in the last few years. In consequence this country could expect a flood of new equipment on the conclusion of hostilities & engineers should accordingly prepare for its application to NZ problems.

At Sydney University (where Sir John is Dean of the Faculty of Engineering) the University authorities took the view that research, investigation and enquiry must be given priority even over engineering professional subjects, he stated.

36. Electronics-Canterbury College Research-City Councils Grant & Scholarship.

(PRESS, 24 August 1943)

As a result of a recent report by Sir John Madsen on the work of the School of Engineering, a special section on electronics is to be established. This requires apparatus and equipment suitable for research work which Sir John Madsen recommended be carried out in conjunction with the Engineering course. It is probable that some of the evening classes formerly conducted at Canterbury College will in future be handled by the Technical College while the School of Engineering at the University concentrates on the University degree work.

37. New Electronics Laboratory- Wide contribution to science-Canterbury College Development.

(PRESS, 28 September 1943)

A new electronics laboratory is being established at the School of Engineering of Canterbury University College following the inspection of facilities made by Sir John Madsen, Professor of Electrical Engineering, Sydney University & Director of Australian Scientific Research Liaison.

For the present (during hostilities) the new department will operate in direct conjunction with the Development Branch of DSIR now working at Canterbury University College under the direction of Mr T R Pollard. If this new Department is fully equipped & working by the time the war ends investigations will be carried on & hopefully brilliant young men will be retained instead of going abroad.

[The DSIR work at Canterbury University College involved a Radio Physics department which Dr F W White had developed since his arrival}.

38. Goodwill Mission-Australian Scientists to visit India.

(Otago Daily Times, 23 December 1947)

A Goodwill Mission of Australian scientists will visit India shortly to inspect Government & University research centres & to report on scientific developments generally. The delegation of 5 headed by Sir John Madsen, Professor of Electrical Engineering, Sydney University, will leave Australia by air at the end of the year & will spend a week at the annual meeting of the Indian Science at Patna.

39. University of Sydney-Chair of Electrical Engineering (Advertisement).

(Otago Daily Times, 5 June 1948)

An appointment is to be made on the retirement of Sir John Madsen. A salary of 1500 pounds pa. & superannuation & pension at age 60 (400 pounds pa). Applications close 15 August 1948. G Dale Registrar.

40. MR T R Pollard to advise on research in Singapore.

(PRESS, 12 July 1960)

In 1945, the University College Council acting on the advice of Sir John Madsen of the University of Sydney asked Mr Pollard to set up a Department of Electronics in the Engineering School. Mr Pollard was appointed lecturer in charge of the Department & with the retirement of Professor Powell in 1946, Mr Pollard was appointed Acting Professor in Electrical Engineering.