



# Reflections

## REFLECTIONS

Atmospheric Radar  
Systems Pty Ltd  
ABN 87068909740

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## Leaders in Ground-Based Atmospheric Remote Sensing

### A Message from the CEO



ATRAD has been a quiet achiever in the Atmospheric Remote Sensing arena since 1995. We have focussed our attention primarily on meeting the needs of researchers in the fields of Atmospheric & Space Physics.

In meeting the needs of our

research customers, ATRAD has developed a range of products and capabilities which have wide application in commercial and operational areas, as well as amongst our traditional research customer base.

After a period of rapid growth and intensive R&D activity, ATRAD is now pursuing an expansion of its activities in the broader commercial marketplace, specifically targetting Meteorological, Aviation and Environmental monitoring applications.

There are always many exciting projects underway at ATRAD and with the launch of this Newsletter we hope to be able to keep you informed about our new research and

product development activities, introduce you to some of our key staff and share news of our successes with you.

For detailed information on our product range or to view the latest live radar and wind profiler results, I invite you to visit us at [www.atrad.com.au](http://www.atrad.com.au).

To request information or provide feedback, email us at [info@atrad.com.au](mailto:info@atrad.com.au)

Yours Sincerely,

Rob Silva  
CEO

#### News In Brief:

##### Conferences:

- See us at COST 720 and ISARS 2002

##### New Product Release

- Second Generation MF Radar product released
- Highly modular and flexible architecture for turn-key and research applications
- System configurations from 8kW to 128kW

##### New Installations

- Meteor Radar for Wuhan, China
- Boundary Layer Wind Profiler leased to yacht racing syndicate
- Third Boundary Layer Wind Profiler delivered to Australian Bureau of Meteorology

ATRAD will be well represented at the **COST 720 Integrated Ground-Based Remote Sensing Stations for Atmospheric Profiling** workshop to be held in L Aquila, Italy from June 18-21.

Dr. Iain Reid will be presenting a paper on VHF Windprofilers on behalf of ATRAD, while Prof. Bob Vincent will give a general overview of the performance of VHF Profilers. CEO, Rob Silva will also be attending the workshop.

Immediately following the COST720 workshop is the **International Symposium on Acoustic Remote Sensing (ISARS 2002)** in Rome, Italy from 24-28th June 2002.

While ATRAD is not presenting any papers at this symposium Dr. Iain Reid and CEO Rob Silva will be in attendance throughout the proceedings.

If you are attending either of these workshops and have a radar requirement, we would be delighted to discuss your needs in person.

Please introduce yourself to us or, if you prefer to make an appointment in advance, please email us at [info@atrad.com.au](mailto:info@atrad.com.au)



A beautiful Woomera sunset seen through the Tropospheric radar array

### New Tropospheric Radar for NAL

ATRAD has recently commissioned a new 100kW Tropospheric Radar for the Japanese National Aeronautics Laboratory (NAL). The system is used for launch decision support and in-flight data collection for NAL's supersonic transport plane development programme.

The system is installed at the Woomera rocket range in South Australia.

## ATRAD Board of Directors



Mr. Nick Begakis, AM  
Chairman



Dr. Iain Reid  
Science Director



Prof. Bob Vincent  
Science Director

## A Brief Introduction to ATRAD

In this first issue, we introduce the Company and its Board of Directors. In future issues we will profile key staff and their achievements.

### The Company

Atmospheric Radar Systems Pty Ltd (ATRAD) is a private company specialising in the development, manufacture and supply of ground-based systems and components for environmental remote sensing.

ATRAD exports over 80% of its production and has more than 30 major systems operating in a dozen countries around the world.

The company was established in 1995 to commercialise world-leading technology developed by the Atmospheric Physics department of Adelaide University.

ATRAD holds an exclusive license for commercialisation of this technology. This provides access to an ongoing stream of world-class research to supplement its own research and development activities.

In its short life, ATRAD has developed an impressive range of products for both turnkey and research applications.

ATRAD's facilities are situated in Thebarton, South Australia and are within Adelaide University's Commercialisation & Research Precinct.

The company employs twelve permanent staff and a number of consultants and contract staff.

### Products & Services

ATRAD's core products include:

- Wind profiling radar
- Meteor detection and Meteor tracking radar
- Ionospheric Radar
- Atmospheric Radar

Systems are available to cover regions up to the Boundary, Tropospheric, Stratospheric and Mesospheric regions of the atmosphere.

Systems are available for turnkey and remote control applications as well as custom-designed research systems.

In addition to complete radar systems, ATRAD provides sub-systems, radar upgrades, maintenance and related consulting services.

*ATRAD designs, develops,  
integrates and markets  
innovative,  
leading edge systems for  
environmental remote sensing,  
monitoring and interpretation*

## MF Radar Nostalgia

Rob Silva is pictured presenting a training certificate to Mr. Effendy of the Indonesian National Institute of Aeronautics and Space (LAPAN).

The radar unit pictured to the right is the very first radar produced for sale by the University of Adelaide Physics Department and which ultimately led to the formation of ATRAD.

The radar was originally installed at Pontianak (on the island of Kalimantan), Indonesia in 1994. It was commissioned by a consortium consisting of Adelaide University, Kyoto University's Radio Atmospheric Science Centre (RASC) and LAPAN.

The radar operates at 1.98MHz and forms

part of a network of MF radars placed along the equator to investigate dynamics of the Upper Atmosphere (60-100km).

The radar was recently in Adelaide to repair damage caused by a significant lightning strike.

ATRAD is soon to deliver a new radar system which has much enhanced capability and will supplement the operation of the existing radar.

The new radar provides a 50kW output and the array is arranged in a Mill's Cross configuration. The new radar will be used to investigate wave momentum deposition.

Mr. Effendy and Mr. Erlanseh participated in the repair of the original as part of a training programme. They also received technical



**ATRAD**

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### FURTHER INFORMATION

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