



Australasian Hydrographer

June/July 2003

Inside this issue:

Welcome	1
2003/4 Deadlines	1
Notice of Annual General Meeting, 2003	2
12th National Hydrographic Conference	2
Sand Groper News	3
HYDSTRA HUG, 2003	4
Office Bearers	4
Need a Job	4
Technohead	5
Notice of Election of Chair Person, AHA	6
Your Web Site	7
Application for Membership	8

2003/4 DEADLINES

The following are dates by which I require submissions, and advertisements, for the newsletter and quarterly journal to be in my hands.(or on my computer!)

ISSUE	DATE
August (Q)	08/08/03
Sept/Oct	03/10/03
November (Q)	06/11/03
Dec/Jan	16/01/04
February (Q)	06/02/04
Mar/Apr	02/04/04
May (Q)	07/05/04

The views expressed in this publication are those of its contributors and do not necessarily represent those of the Australian Hydrographer's Association Inc or its office bearers.



Welcome to the June/July Newsletter

Hello Hydrographic Colleagues,
This issue sees preparations afoot for our Annual General Meeting of the Association on August 27, in Hobart Tasmania. The AGM is sharing the venue of the HYDSTRA Users Group Conference to be held in this week as well. More details about these events are contained later in this newsletter.

Unfortunately as we go to print, Les Marshall, our Chairperson elect, has tendered his resignation from the position of Chairperson for personal reasons. A nomination form for the position is also contained within this newsletter. Voting for the position of Chairperson will occur at the Annual General Meeting in August.

AHA committee members are voluntary positions elected by the membership of the Association and generally are not too taxing on the individual, so why not put your hand up or do someone else in!

It is great to see that our Sandgroper colleagues from across the deserts have formed a Western Australian Branch of the Association, a short report is contained in this newsletter.

We have also received a first announcement for our *12th National Hydrographic Conference* to be held on the Gold Coast in Queensland in late July, 2004. Thanks to Ray Alford for commencing the process to get this event up and going. The theme is "*The Science of Hydrography - Looking Forward, Looking Back*".

So things are happening around the place. Hope to catch up with some of you in Hobart.

Mic Clayton, Publicity Officer, AHA



Australian Hydrographer's Association Incorporated

Notice of Annual General Meeting, 2003

5.00 – 6.30 pm on Wednesday, August 27th, 2003

Location: The Old WoolStore

1 Macquarie St

Hobart, Tasmania

(In Conjunction with the Hydstra Users Group Meeting, 2003)

AGENDA

- Apologies
- Minutes of the 2002 AGM
- Financial Report – Max Hayes (Treasurer)
- Membership Report – Scott Walker (Secretary)
- Journal Report – Mic Clayton (Publicity Officer)
- Special Item - Election of Chairperson
- 2004 AHA Conference
- General Business

DATED THIS 30th DAY of JUNE, 2003.

by AUTHORITY of the Committee

Mic Clayton

Publicity Officer

Australian Hydrographer's Association Incorporated (AHA)

First Announcement, 12th National Hydrographic Conference



26th - 27th July 2004
ANA Hotel - Gold Coast

The 12th National Hydrographic Conference will be held next year on the Gold Coast in Queensland. The event is being organised by the Department of Natural Resources and Mines and will be held over two days starting on Wednesday 26th July 2004.

The theme of the conference will be "*The Science of Hydrography - Looking Forward, Looking Back*" which should give scope for input from our members who perhaps are not on the cutting edge of Hydrographic technology.

In conjunction with the conference, it is intended to hold an Australian Hydrographic Association meeting on the 25th, the evening preceding the event and a HYDSTRA group meeting on Friday 28th July. A field

excursion will also be organised on that day for those not involved, or wishing to attend, the HYDSTRA group assembly.

Limited block accommodation has been booked at the ANA hotel, in Surfers Paradise, at very reasonable rates for those who wish to stay there.

Further details of this conference including attendance fees and cut-off dates for the submission of papers will be made available as soon as possible.

Convenors

Ray Alford Ray.Alford@nrm.qld.gov.au

Paul Martin Paul.Martin@nrm.qld.gov.au

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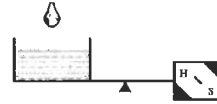
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Sand Gropers News

Western Australian Hydrographers have formed a state body under the AHA banner!

For some time now there has been a growing interest and demand for Hydrographers and Hydrographic activity in WA. On the 26th May, 2003 a number of WA Members of the AHA got together for a social gathering and to try to promote greater interaction between various practitioners. The meeting was held at the Canning Vale Tavern, the local watering hole for the Water Corporation's Hydrographic Group (Asset Monitoring Services). The Dinner/Meeting was attended by 13 WA members with apologies from a further 7 members. The attendees were from the Water Corporation, Water & Rivers Commission (now the Department of the Environment), Alcoa, Greenbase Consulting and Hydrosmart.

The meeting resolved to investigate forming a WA Branch of the AHA to coordinate and provide a voice for WA Hydrographers.

The Office Bearers for the West Australia Group are:

Chairperson	Allan Deane	Water Corporation
Secretary	Russell Marks	Greenbase
Treasurer	Kel Baldock	Hydrosmart
WA Rep. (AHA)	Mick Whiting	Water Corporation
News & Publicity	Frank Davies	Dept. of Environment.

Allan Deane
Manager, Asset Monitoring Services
Perth Region
Canning Vale
Ph 9424 8565



We are pleased to advise that the **2003 Hydstra Australian User Group Meeting** will be held at the Old Woolstore, 1 Macquarie Street, Hobart in Tasmania on Wednesday August 27th and Thursday August 28th.

Following last years one day meeting which was held in conjunction with the 11th Australasian Hydrographic Conference, the program will this year revert to a two day program similar to that previously conducted by HYDSYS, namely:

Wednesday 27th

8:30am - 4:30pm User Group Meeting

4:30pm - 6:00pm Australian Hydrographers Association meeting

7:00pm - 10:30pm User Group Dinner

Thursday 28th

8:30am - 5:00pm User Group Meeting

To add value to the User Group experience, we will be holding training sessions on the two days prior to and the day following - see below.

Further details, including costs, accommodation, presentations and registration can be obtained from HYDSTRA:

Email:

support@hydstra.com For Paper Presentations

rileyt@hydstra.com For training sessions

jacksont@hydstra.com For registration forms

On behalf of the management and staff of Hydstra, I invite you to join us in Hobart for this important opportunity to further environmental data management in Australia.

Ian Donoghue

General Manager, Hydstra Pty Ltd

AHA Office Bearers and Contact Information

Chairman, Vacant.

Contact Secretary or Publicity Officer (Details Below)

Secretary, Scott Walker

Scott.Walker@sydneywater.com.au

Treasurer, Max Hayes

gipps-hydro@i-o.net.au

Publicity Officer, Mic Clayton

michaelc@tassie.net.au

Public Officer, John Skinner

jskinner@ecowise.com.au

Web Site: <http://www.aha.net.au>

NEED A JOB

(Some selections off the web)

Water Information Officer (000116)

Department of Primary Industries, Water and Environment

Applications Close:- Friday, 18 July 2003.

Salary:- \$39,757.00 - \$42,828.00 per annum.

Technical Employees Award, Level 3.

Permanent full-time.

Location:- New Town.

Commencing salary within the range will be determined in accordance with qualifications and previous relevant experience.

Duties:- To monitor, analyse and report on the water resources of Tasmania and ensure the effective collection and archiving of water resource data.

Provide an advisory service related to water quantity information and provide advice on all aspects of water resource data collection.

Essential Requirements:- A Diploma in Civil Engineering from a recognised TAFE institution or an equivalent qualification appropriate to the nature of the work.

Desirable Requirements:- Ability to swim. Ability to work at heights Swift Water/Boating training. A current First Aid Certificate. A current motor vehicle driver's licence.

Enquiries to Wendy Webb for a copy of the Statement of Duties including the selection criteria, phone 03 6233 6328, email Wendy.Webb@dpiwe.tas.gov.au

You can also try the AHA web site at <http://www.aha.net.au>

OR

Subscribe to 'NRMjobs' by sending a blank email to:

nrmjobs-subscribe@emailmedia.com.au

Techno Head

Techno Head was shoved out of his clean water environment recently to muse on the issue of climate monitoring, in particular, monitoring wind speed and and its associated direction.

Technohead was observing his new wind monitor and even though the vane was generally pointing to the north consistently his data kept coming out as the wind being a southerly. Being a technical mastermind Technohead checked all his connections, checked his data logger processing, tested other psuedo sensors in his rig but kept getting this anomaly.

On the phone to Psychobabble went Techno.

“World Meteorological Organistaion guidelines on continuous wind monitoring generally work on averaging readings over ten minute periods, including maximum wind gusts in that period. Not a problem! But direction is different” advised Psychobabble.

Unlike many other sensors Technohead used in his water work where the sensor has a minimum output and a maximum output and the measured variable moves up and down within those bounds wind direction goes around in circles. What happens when the wind direction being measured is wandering in the vicinity of between 355 degrees and 5 degrees over a period of time? Common sense tell you that the average direction would generally be expected to be about 0degrees/360 degrees (whichever you choose - they are the same direction)

Unfortunately normal straight averaging of inputs from normal analogue signals for wind direction results in this anomaly. While a wind sensor might output a 0 to 5 volt signal, representing 0 to 360 degrees of direction, if the analogue signal is chopping between near 5 volts and just above 0 volts (if the wind is generally from the north) straight averaging will result in the logger interpreting this as 2.5 volts and then calling it a southerly!

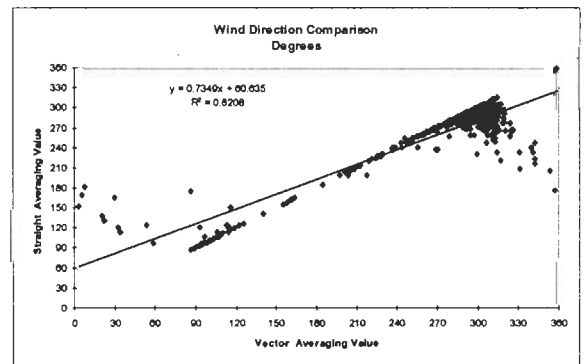
“You need to employ vector or scalar averaging of your input signals to get the correct average direction”

advised Psychobabble. “The most common is vector averaging where you look at the wind direction output in terms of the circular geometry of direction. Vector averaging of direction is often used by those other hydrographers that measure the oceans as ocean currents do the same thing to their readings as well. Do you remember All Stations To Central?” asked Psychobabble. (Technohead started getting that glazed look!)

“Basically you convert the wind direction into sine and cosine values to get values of between -1 and 1 depending on which quadrant your direction lies in. In the 0 to 90 quadrant all trig values are positive, in the 90 to 180 quadrant only sine is positive, the next quadrant only tan is positive and in the 270 to 360 cos is the positive value. Hence All Stations To Central You mean these values over the period of averaging and then plug them back into the arctan equation to get the appropriate average wind direction, simple!”

Technohead continued glazing over.

“OK’ said Psychobabble, “Let’s look at it without going into the finer details. I did some tests on this comparing a vector averaged wind direction against a straight averaging of the direction. Look at the following graph.



“As you can see the data has tails that skew at the zero and 360 degree ends of the chart. Putting a line of best fit into the chart also shows how data can be skewed by just using straight averaging of the wind direction. If straight averaging was OK you would expect to see everything in a straight line along a $y=x$ line of best fit! As you can see where vector averaging results are in the 0/360 area the straight averaging shows a trend towards values closer to 180 degrees, hence your southerly anomaly!”

Technohead stared at the graph for some time before uttering, “That’s a good see saw design for the kids”



Australian Hydrographer's Association Incorporated Call for Nominations for position of Chairperson.

As per the Constitution of the Australian Hydrographers Association (Incorporated), members of the Association are advised that the position of Chairperson of the Committee has become vacant and that nominations for filling of the position are being called from the Associations Membership.

The position will be for the period till July 2005, (committee members being elected on a triennial period, **this position will be filled** for for the balance of the current triennial period). Members are advised that only current financial members of **the Australian Hydrographers Association (Incorporated)** may hold a position on the Committee, nominate and vote for positions on the Committee.

Voting for the position of Chairperson will occur at the Annual General Meeting of the Australian Hydrographers Association Incorporated to be held at 5:00 pm on Wednesday, August 27, at The Old Woolstore, 1 Macquarie St, Hobart, Tasmania.

Signed, seconded and accepted nominations may be made on the form below, or copy thereof, and forwarded to the Secretary, Australian Hydrographer's Association Inc, PO Box 456, Bowral NSW prior to the AGM.



Australian Hydrographers Association Incorporated **Nomination Form**

I, _____ wish to nominate _____ for the position of
Chairperson of the Australian Hydrographer's Association, Incorporated.

I, _____ second the above nomination for the position of
Chairperson of the Australian Hydrographer's Association, Incorporated.

I, _____ accept the nomination for the position of
Chairperson of the Australian Hydrographer's Association, Incorporated.

(Nominator signature)

(Seconder Signature)

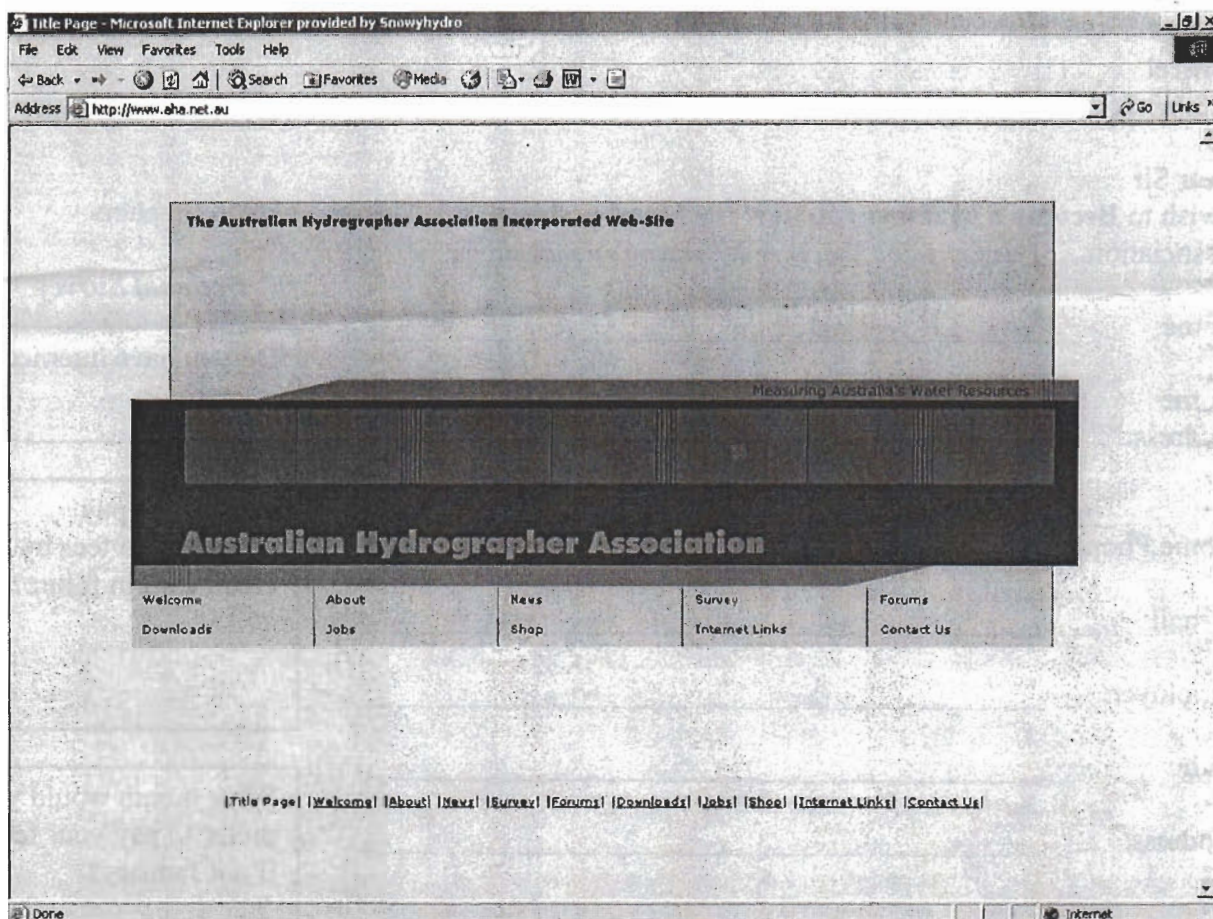
(Nominee Signature)

Date

Date

Date

WE ARE ON THE WEB!!!!



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Can You Help?

I am a librarian at the Water and Rivers Commission in Perth, WA. I have had a request from one of our staff members for a conference paper authored by Bruce Nicholson at the 5th Australasian Hydrographic Workshop (1986?)

The details he has provided me with are a bit sketchy, so I was hoping you could fill me in with which paper it may have been. He said the paper was about quality assurance and ratings but that is all I know.

Thanking you

Nicole Wreford, Information Officer, Department of Environment - Information Centre
Level 2, Hyatt Centre, 3 Plain Street East Perth WA 6004 Tel: (08) 9278 0464 Fax: (08) 9278 0301
email: nicole.wreford@wrc.wa.gov.au



AHA Membership Application Form

The Secretary,
Australian Hydrographers Association,
P.O. Box 456
Bowral
N.S.W. 2576

Dear Sir

I wish to **Become a Member / Renew my Membership** of the Australian Hydrographers Association. *Please fill out all fields so we can maintain our database*

Optional Survey

Name: _____

Do you have internet access?

Home Address: _____

Would you pay membership fees by credit card in future?

Home Phone: _____

E-mail: _____

Employer: _____

Title: _____

Address: _____

What month would you prefer to pay your fees if not January?

Work Phone: _____ Fax: _____

Declaration: My employer is an Australian Hydrographer Assn. Corporate member. Y / N
My employers' membership number is _____ (no number no discount)

Membership Grade: **Individual Member (\$100 to end of Year 2003)**
Corporate Member Employee (\$90 to end of Year 2003)
Retired/Student/Cadet (\$50 to end of Year 2003)
Corporate (\$500 to end of Year 2003)

I enclose \$ _____ . *Please make cheques payable the Australian Hydrographers Association*

I wish to receive my correspondence at my **Home / Work** Address

I wish to receive my issues of *WATER* magazine at my **Home / Work** Address.

Monthly newsletters will be sent to your e-mail address unless otherwise indicated

Signed: _____

Use the back of this form to forward any comments – please don't write under this line

Member No.

Database Update

Receipt Printed

Treasurer in receipt of monies directly

Publicist Informed

Other