

CUSTOMISED AUSTRALIAN-DESIGNED POCKET
PC/GPS SOFTWARE IS WATERMARK TECHNOLOGY...

X marks the cop

Paperwork is a curse to rank with taxes, homework, and umpires. So salute Senior Constable Greg Barras of the Victorian Water Police/Search and Rescue Squads who transformed irritation into innovation, driving the development of an application for a handheld computer/GPS unit to streamline water police data gathering on some 2000 penalty notices and 4000 warning notices each year.

The prototype secret weapon in the efficiency war is 'PatrolPad', a pocket PC with inbuilt GPS and customised mapping and data software.

Senior Constable Barras and his colleagues will soon have a dozen units and a base station to demonstrate how, for instance, an hour or more at the end of a 10-hour shift can be transformed from paperwork to active policing.

Greg, who enjoys "niggling away to find a better way of doing things", really got irritated with handwriting – three times – the warnings issued for scores of boating sins like possessing expired flares, failing to carry a torch, and not being able to reach safety equipment immediately. Officers have discretion to issue formal warnings for such minor breaches.

The old way: There is no easy and immediate way for officers to check data gathered by colleagues. For instance, a vessel recently checked in the prohibited waters off Swan Island near Queenscliff had been warned for the same offence a few days earlier by another officer. It took some time for a crosscheck to show that a second warning was merited.

Notwithstanding some public perceptions, the water police usually give one, sometimes two warnings for minor breaches of the regulations before going for the Penalty paperwork. Greg first writes all the details in his notebook, and then, when back from the water beat, he'll copy everything onto a Running Sheet. With warnings, for instance, he'll again write the same details onto a warning notice,



which will be checked by the duty Sergeant. Sometime later an admin officer keys the basic information into the database (which allows some cross-checking with earlier offences). Eventually Greg's warning notice is mailed.

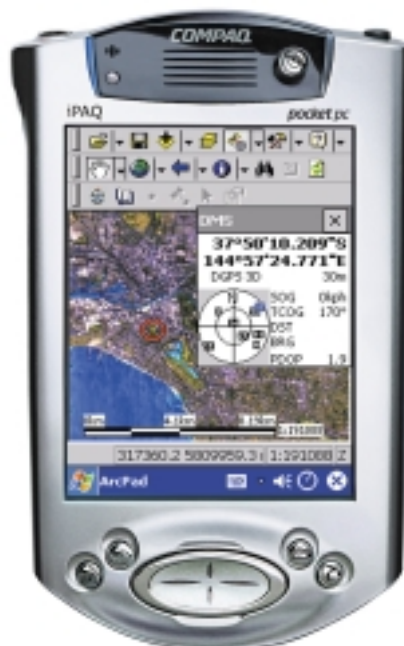
"Time-consuming, with multiple entries which increase the chance of error," Greg says. "There's no link between warning and

penalty notices; and because not all the voluminous warning data is entered into the database, and there's no mapping function, it's difficult to identify trends in problem areas and re-assign police efficiently."

The new way: Greg has long been fascinated with "mapping, and electronic bits like GPS, although I have no formal computer qualifications." He's an outdoors enthusiast who holds qualifications in bushwalking/mountaineering leadership, ski tour leadership and a Diploma in Search and Rescue Management.

Last September he took 14 years of Police experience to Elvin Slavik, co-founder of R.I.A. TerraSystems of Melbourne (now partially owned by ESRI) which has a world market for its ArcPad software (once MapPad). ArcPad, marketed globally by ESRI since 2000, has thousands of users, 95 per cent of them overseas. It was this success that resulted in R.I.A. winning the Innovation Category for the Victorian Division of the Telstra 2001 Small Business Awards as well as being a National Finalist for the Channel 9 Small Business Show.

Greg's crusade coincided with release of Version 6, a major advance featuring a customisation option (as well as introducing



versions in Chinese, Japanese, French, German, Spanish, and Italian.)

R.I.A. co-founder and managing director Jeff Bailey says ArcPad dominates the world market for handheld mapping “GIS without sweat” applications. “No GIS expertise needed – it’s ideal for council people, bushwalkers, soldiers, etc... a classic Victorian case history involved the Mornington Peninsula Council which taught it to students on holidays and unleashed them on mountain bikes to log council assets in all sorts of remote places, with enormous productivity.”

Over only three months of part-time effort, Greg and Elvin used the customising option to insert all the water police’s requirements on to a Compaq iPAQ pocket PC. Customised toolbars include all the forms (designed so you can’t move to the next page until all necessary info is included); scalable mapping options over land and sea (using NRE databases); details of offence codes and penalties, and the exact position of the offence, thanks to the inbuilt GPS.

With some 15 minutes of training on the touch screen technology and data menu, you use a pointer to select data, or input it via a keyboard on the screen. There’s also a graphics pad for handwriting, and scene of crime sketches.

Back at the office – no more writing! You dock PatrolPad in a holder by the main computer, data is downloaded (and uploaded if needed) and you can print warnings, running sheets, management maps and other information. The far greater collection of data, now map-linked, also offers documented offence analysis and trends to identify future policing priorities.

Greg looks forward to going beyond water police duties in such applications as search and rescue (where, for instance, the GPS function and mapping makes it far easier for on-the-spot direction of police and civilian searchers), the Major Collision Investigation Unit and the Melbourne City Patrol. You could map disaster sites and crime scenes.

Above: PatrolPad’s co-developers, Senior Constable Greg Barras of the water police, and Elin Slavik of RIA TerraSystems.

Right: Senior Constable Greg Barras logs details of a safety equipment check on PatrolPad with Senior Constable Terry Fitzmaurice.

Left: the PatrolPad – it’s light, portable and easy to use.



Elvin Slavik says PatrolPad could lead the world in this application of spatial technologies to policing. “Others are working in the area, but this Victorian innovation seems by far the most efficient tool. I am confident it

will draw a lot of interest from Australia and overseas.” Greg Barras was recently invited to Sydney to demonstrate PatrolPad to his counterparts.

Notwithstanding the perils of salt air, heat and sand, “PatrolPad” comes in a toughened case and is expected to be robust.

If you’re thinking of breaking the law on the water, remember one other PatrolPad inbuilt feature: a taperecorder. If you choose to tell Greg what he can do with his high-tech data collection unit, you might also be literally telling it to the judge.

Enjoy your boating!

WANT TO KNOW MORE?

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