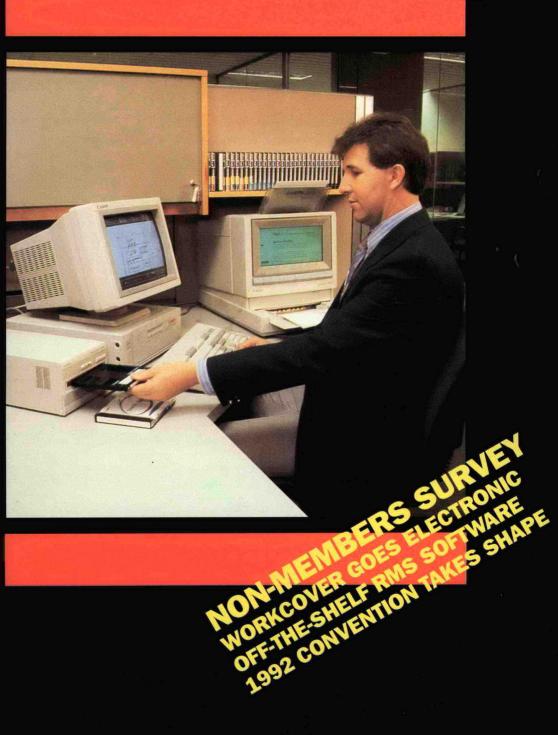


OFFICIAL JOURNAL OF THE RECORDS MANAGEMENT ASSOCIATION OF AUSTRALIA ISSN 0816-200X \$10 VOLUME 8 NUMBER 2 MAY 1992





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## **EDITORS**

Jim Shepherd MRMA Thomas Kaufhold ARMA Judy Watts ARMA Ray Holswich ARMA Ross Thompson ARMA

## **CONTACT DETAILS**

The Editors INFORMAA QUARTERLY GPO BOX 293 DARWIN NT 0801

#### **PHONE:**

Judy Watts 089 852222 Jim Shepherd 07 2254600 Thomas Kaufhold 06 2764709 Ross Thompson 06 2807665 Ray Holswich 089 466076 Advertising, editorial and print production MEDIA FOCUS Pty Ltd PO Box 254 Gladesville NSW 2111 Geoff Wyatt Nigel Dique Phone: 02 879 6655 Fax: 02 879 6282

#### **EDITORIAL NOTES**

INFORMAA QUARTERLY is a publication of the Records Management Association of Australia. Members of the Association receive the Quarterly as part of their membership entitlement.

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ISSN 0816-200X

Price \$10.00 plus postage



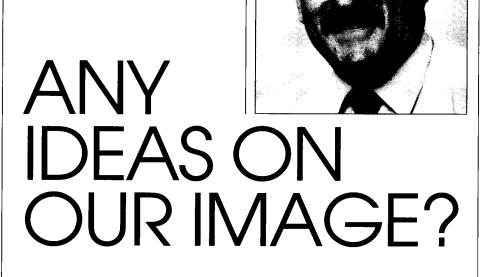
# INFORMAA CONTENTS MAY 1992

Contributors' opinions do not necessarily represent the views of the Records Management Association of Australia.

The next edition of INFORMAA QUARTERLY will be in August 1992.

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## PRESIDENT'S MESSAGE



The February edition of INFORMAA Quarterly attracted comment both good and bad which is to be expected, and has been passed on to the producers.

Putting a "new" publication together is not easy, as quality articles of interest have to be sourced and advertising generated in a recessed economy. We will strive to improve future editions. Some members did express some concern about the 16 pages used to produce the association's annual report and financial statements. I will simply say that we are bound by corporation law to advise all members (shareholders) of the activities of the association for the preceding 12 months. Unfortunately there is no easy way out and members will recall that in past years the annual reports have been included in the first available edition of INFORMAA Quarterly.

While on the subject of INFORMAA Quarterly, the Executive would be happy to hear from any member of the association who is willing to take on a role as part of the editorial committee (four members).

Following the February edition's MAP Marketing Survey summary of RMAA members, this edition contains the summary results of the non-members surveyed. Bearing in mind that it is your association we are dealing with, I invite comment and ideas form all members on how we can use the summaries to better our image and improve the activities of the association. Comments will be treated in confidence and can be forwarded to either the Federal Secretary (Judy Watts) or the Branch Secretary in each State or Territory. Please mark your envelope "survey". Each comment will be considered along with the recommendations received from MAP Research and all members will be advised accordingly.

During February, 1992, I attended the State Seminar conducted by the Victorian Branch and also had the pleasure of meeting the members of branch council as well as of being an observer at the general meeting of the Local Government Chapter (Victorian branch). Thank you to the Victorian branch for your hospitality.

Focussing on the Victorian branch for a moment, in particular the Local Government Chapter: it was very interesting to hear the representative views and concerns relating to "voting rights" of corporate members and the eligibility for upgrade to professional status. After listening to their submission, I offered to discuss the matter with the members of the Federal Executive during our meeting in Canberra and have since written to the spokesperson, Anne Doherty (Melton Shire) advising her of the conditions as listed in the Memorandum and Articles of Association.

It was interesting to note that the membership of the Local Government Chapter, in part, have concerns and are prepared to air them, particularly after such a short period of operation and yet it is difficult to extract the concerns of the membership generally. Perhaps the Local Government Chapter is trying to tell us all something.

I am informed that the registrations and/or expressions of interest for the 1992 National Convention in Sydney are flowing in thick and fast. Fiona Meyer and her committee are working extremely hard to ensure success of the convention and I encourage members and non-members alike to register early. I look forward to meeting you in Sydney in September, 1992.

RAY HOLSWICH FEDERAL PRESIDENT

## ANNUAL CONVENTION

## FOCUS ON SYNERGY

The 9th National Convention of the Records Management Association of Australia will be held at the Hilton Hotel in Sydney on September 8-11, 1992. The theme of the conference will be "A Focus on Synergy". The convention papers will focus on the synergy of different professional skills and areas such as records management, archives and information management, the aspects of similarity and the reasons for differences.

The conference will, in particular, address the training requirements of these professional groups and review the impact of technology and technological change on the professions.

An impressive range of Australian and New Zealand speakers have been invited. Each is a specialist in their field and brings a unique perspective on the industry and the issues to the conference.

Professor Mairead Browne "Professional Development Through Education"

Ass. Professor Joyce Kirk "Information,

Technology and Organisations: Challenges for the Education of Records Managers"

*Marita Hoo* "Making Transition Through Training"

David Major "The Synergy of the Information Profession"

*Lynne Hunter-White* "Technology Blurring the Edges: The Technocrat Under Threat"

*Michael MacLean* "If it Ain't Broke, Don't Fix It: Matching Solutions to Problems"

Lynn Allen "Mapping the Territory: Who Does What to Whom"

*Tam Best* "Managing the Conglomerate of the Professions: An Overview"

*Patricia Thompson* "Keeping Your Feet on the Ground: The Basic Skills Needed to Maximise High Technology"

Janet Howse "Shifting Up: Leveraging Career Opportunities"

Joanna Newman "Using Synergy to Business Advantage"

Sue McKemmish "Theory, Knowledge and Skill Bases for Information Professionals" Converging or Diverging" A strong social programme has been planned in addition to this outstanding range of speakers. Included is a "Trip Down the Nile" formal dinner, a welcome cocktail party, and an evening at the Opera House.

The NSW Branch of the Association is expecting a large turnout at the Convention over 200 professionals have registered their interest. Thirty suppliers have already nominated for display booths. The Association has negotiated excellent rates with a number of properties and has packaged together a very attractive advance purchase "early bird" package for convention participants. Early bird packages close on 30 June 1992. Ansett is the official carrier.

Canon Australia is once again the major sponsor.

Registration documents are available from April 1992 from: Eleanor Loveridge Conference Action PO Box 1231 NORTH SYDNEY NSW 2059 Ph:(02) 956 8333 Fx:(02) 956 5154

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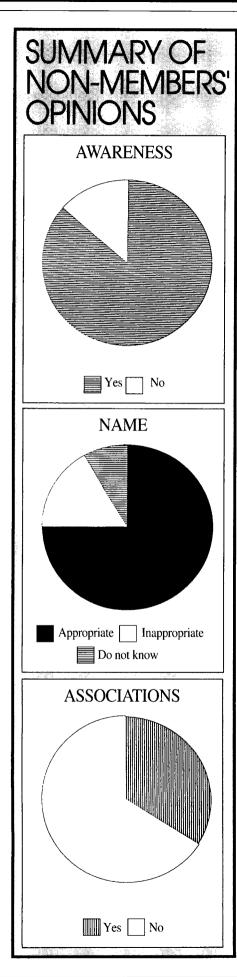
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## **NON-MEMBER SURVEY**



## **IS OUR PROFILE TOO LOW?**

A survey of non-RMAA members reveals that 67 per cent have a positive image of the association and the remainder a negative image.

However, 73 per cent say the association's profile is either low or below average. And while 75 per cent of the nonmembers think the name is appropriate, a majority said it needed to be called the Information Management Association.

The research was conducted by Marketing Advisors for Professionals Pty Ltd, of Newcastle, directed by Maria Charlton. The non-members researched were chosen from participants in RMAA conferences, hence the non-members had initial contact with RMAA activities.

A summary of similar survey of member needs was published in the February issue of INFORMAA Quarterly.

The non-member research questionnaire was designed and tested so that comparisons could easily be made between the member and non-member research. A trained research team interviewed 125 non-members.

#### AWARENESS OF THE RMAA

As the respondents had initial contact with RMAA by enquiring or attending association conferences, there was a high non member awareness. About 86 per cent of respondents stated they were aware of the RMAA and 14 per cent were not aware.

#### **IMAGE OF RMAA**

Respondents with a positive image made up 67 per cent of the sample, and negative image 33 per cent. One of the main reasons for positive non-member image is the quality of seminars organised by the RMAA. The major reason for the negative image is the low profile of the RMAA.

## APPROPRIATENESS OF NAME

About 75 per cent of the non-members said the name was appropriate, 17 per cent thought it was inappropriate and eight per cent did not know.

## SUGGESTED NEW NAME

The majority of respondents suggested that

RMAA needs to be called the Information Management Association.

#### PROFILE

When asked about the profile of RMAA, nine per cent said it was high, 19 per cent above average, 30 per cent below average, and 43 per cent low.

#### COMMUNICATION

Communication methods that were perceived to be the most effective include newsletters, conferences, word-of-mouth, letters and news articles.

#### **OTHER ASSOCIATIONS**

About 34 per cent of respondents belong to other associations. The major ones include Australian Library and Information Association, 16 per cent; Australian Computer Society, nine per cent; Medical Records Association of Australia, nine per cent; Institute of Chartered Accountants, seven per cent; Australian Institute of Management, 4 per cent; and Australian Society of Certified Practising Accountants, four per cent.

#### SATISFACTION

About 45 per cent said that the satisfaction rate with their current association was above average, 26 per cent high, 12 per cent very high, 12 per cent below average, and five per cent very low.

#### **MOST DESIRED SERVICES**

When asked to assess the importance of member services of an ideal association the following were assessed as important:

Service % Important Rank	ings
Skills updates and training	89
Meeting with other members/networking	81
Establishing ethics and practice	80
Professional recognition/status	71
Professional publications	68
Special interest/industry groups	60
Liaising with other professional associations	54
Technology trade fairs	46
National conventions	35
Lobby Group	32

#### **EDUCATION**

About 46 per cent of respondents said they had educational qualifications and 54 per cent did not. The most common types of educational qualifications held by non-members are Bachelor of Arts, 14 per cent; and Bachelor of Business, nine per cent.

## **EDUCATION PROVIDERS**

Respondents perceive the main providers of records management information to be TAFE, 35 per cent; universities, 33 per cent; RMAA, seven per cent; and the AIM, six per cent.

## **RELEVANCE OF COURSES**

Current institutional providers are perceived to be very relevant to the workplace by 56 per cent of respondents, above average in relevance by 27 per cent, below average by 15 per cent and not relevant by two per cent.

## CONFERENCES

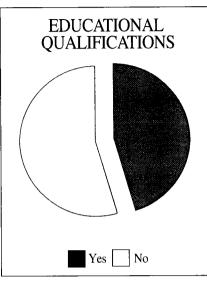
As the respondents were selected from conference participants or enquirers for conferences, 68 per cent stated they had attended conferences.

## **NON - ATTENDANCE**

Of the respondents who had not attended

conferences the following were stated as the major reasons for not attending:

28 per cent did not have the opportunity



15 per cent were not invited

13 per cent insufficient time for conference attendance

## **TOPICS NEEDED**

The most desirable topics for conference

attendance were perceived to be:

- Information technology, automation, computers
- Basic aspects of records management
- Archiving and indexing
- Human resource management
- Future planning and directions

#### TRAINING

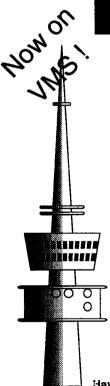
- Areas where training is required include:
- Technology/automation and computers
- Archival procedures
- Management skills
- Record storage
- Optical disk scanning

## **BECOMING MEMBERS**

Non-members stated they would take out membership to the association:

- if it were relevant to their current position 14%
- considering becoming a member 10%
- if more information were supplied on
- RMAA 10%
- if fees were paid by employer 6%

Research compiled by: MAP Research Marketing Advisors for Professionals Pty Ltd For further information, please contact: Maria Charlton, B Com, MBA, ASA, AFAMI Telephone: (049) 622 695



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## **COVER STORY**

# WORKCOVER SAVES \$1 MILLION

The Workcover Authority of NSW has saved nearly \$1 million by choosing a decentralised PC-based electronic filing system instead of a mainframe computer-based network for records management.

The system, which cost approximately \$200,000, is expected to pay for itself in just over a year, in terms of saved floor space rental alone. It comprises two Canon Friday desktop electronic filing systems and a Canon A3 scanner, all used for scanning in documents, and 10 PC stations with their own Canon magneto optical disk (MOD) and CFView image retrieval software.

"Even though we have more than 800,000 files, of which 80 per cent are 'active', installing a mainframe-based network would have been a costly overkill," said Chris Fripp, OIC Office Services at Workcover.

"This way we can keep our records up to date and access any file in just a minute or two. Previously all our files were kept in hard-copy in a basement. It could take half an hour to retrieve one file, and sometimes all day, if file references were incomplete."

Workcover's job is to prevent workrelated injury and illness and its effects through improved health and safety in the workplace, rehabilitating injured workers and compensating injured workers and their dependents. In the Risk Management Division, which is being served mostly by the new electronic filing system, some specialist files are up to 80 years old.

Workcover has 20,000 files in its Lifts Department. These provide a complete history, including incidents, accidents and inspection details, of the 6000-plus lifts operating in Sydney.

Converting these paper files to the new optical disk system compressed 30 square metres of storage into less than half a metre of shelf space. "With the cost of renting floor space at around \$400 a square metre, there is an annual saving of \$12,000 in this category alone," said Mr Fripp, acknowledging that in the first year it would cost around \$12,000 in clerical time to scan in the documents.

Workcover is located at Kent Street and at present is using the fomer Rosebery office as an offsite storage facility and scanning station. A Canon Friday is housed at each location and the CFView retrieval stations are on different floors in Kent Street. The Friday machines are used as "hubs" for high-speed scanning and indexing the documents, and downloading to MOD. The A3 scanner is for documents larger than A4. Two MOD copies are made, one held at the central records area by the Records Management Unit and one by each of 10 departments — such as Dangerous Goods and Lifts — equipped with the CFView system and a laser printer.

The Records Management Unit is responsible for scanning and updating the MOD files.

To retrieve a document, all the departmental operator need do is insert the relevant optical disk into his drive and key in the file number. Each MOD drive has a capacity of 512Mb, or 13,000 A4 pages.

Said Mr Fripp: "Although they are active files, they are in many cases very old and the accession rate is low. It is no problem for the operator to run his or her eye over a shelf and select the relevant disk.

"You don't need a big network for this type of records management, particularly as the operators are in close proximity to the CFView retrieval sttions and do not require access to other records.

"Another rewarding feature is that old and yellowing or brown pages scanned in come out as fresh white copies when laser printed at 400dpi."

Workcover is the first organisation in Australia to install CFView and so far is very happy with the results. "We plan to convert each area to electronic filing step-by-step, with Pressure Vessels (boiler and gas bottles) and Certification Cards (crane licences etc) records next," said Mr Fripp.

"Later, when all the files have been converted, we will explore the prospects of networking. But right now we have a relatively inexpensive and a very efficient solution.

## INDUSTRY NEWS

## WHAT THE CANON-3M TIE MEANS

Canon's appointment as Australian distributor for 3M's Office Document Systems Division, effective May 1, signals a combined thrust for dominance in the micrographics market, as Canon broadens its range to include 3M's 16mm products and 3M climbs aboard Canon's marketing train.

Now added to Canon's large range of micrographics equipment are 3M's 6600 mixed document camera with barcode option, 1500 film duplicator, and 7710 digital microfilm scanner; and 3M's existing customer base of 5000 will be supplied with consumables by Canon. This extended range also offers product connectivity: the 3M 6600, for example, will be used with the Canon CAR-based system for general business documents and records management applications.

The arrangement reinforces the trend to marketing, among medium and small applications, cheaper, tightly-focussed, tailormade product packages taking a solutionsorientated approach; and, for larger applications, more sophisticated configurations including off-the-shelf products.

Canon's information and records management division marketing manager, Mr Tony Poynton, and 3M's office & engineering document systems group sales and marketing manager, Mr David Judge, said that the new electronic technology had written new rules for marketers.

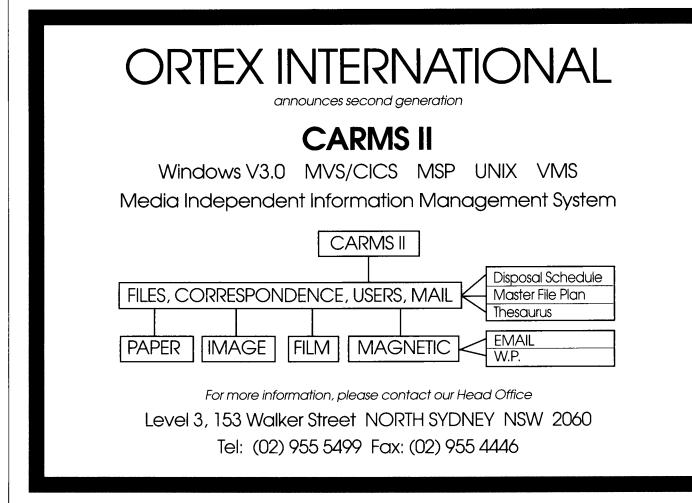
"Vendors can no longer afford to stand alone, without a large client base and strong service support," Mr Poynton said. "We will undoubtedly see rationalisations among smaller companies."

The technology also demanded the maximum R&D input, Mr Judge said.

"Electronic technology has suddenly opened a new door to information management, and those vendors who are unable to make massive R&D contributions will see it close on them."

The arrangement leaves 3M with hardware service rights, focusing on existing agreements and continuing to service all 3M branded products.

Distribution of 3M's automated systems for engineering and related industries will remain in-house. The range includes 35mm engineering systems, hardware for use with CAD-operated systems, and a new range of blackline printers.



## AUSTRALIAN CAPITAL TERRITORY

The ACT Branch hosted the first day's sessions at the Government Technology Event (GTE) in Canberra on February 25, 1992. Topics for the day were based on imaging technology and its application, and speakers included specialists from throughout Australia and overseas. The presentations were of a very high standard, covering interesting topics, and sessions were well attended.

The Branch Council has lost another member recently - Lynn Coleman will soon be married and move to England. We wish Lynn and her fiance all the best for the future and hope she maintains her interest in records management in her new home.

Bill Palmer has joined the Branch Council and Margaret Kenna has taken on the task of INFORMAA Quarterly Editor. Their participation and support is most welcomed.

Ross Thompson Branch President

## **NEW SOUTH WALES**

The organisation of the 9th National Convention is going very well. The very impressive registration documents should have hit your desk by now.

The theme is Synergy and the purpose of the convention is to review and reflect on the changes in both technology and business that are forging new management techniques, and reintroducing older skills.

All the session speakers have been confirmed with a synopsis of each paper being included in the registration document. The trade display has been very well supported with over 90 per cent of the stands already sold. Sponsorship packages are still available for those who missed out on a stand.

With the registration documents being delivered now, everyone has time to take advantage of the early bird registration. ONLY \$495, if paid before June 30, 1992. Please note that this offer will not be extended past this date. Based on the rate after June, three people can attend for the price of two!!

Chris Fripp Branch President

## NORTHERN TERRITORY

The NT Branch is concentrating at the moment on attempting to obtain more active support and assistance from Branch members. Work pressures on Branch Councillors have increased to such an extent that several of them find they are unable to devote the required amount of time to RMAA activities. For just this reason, the Branch Vice-President and the Treasurer resigned recently. It is becoming increasingly more critical that the workload of the Branch be shared among more members if the Branch's objectives are to be met, and members are to be served satisfactorily.

Members will be attending an Executive breakfast on May 5, 1992, at which the speaker will be Mr Bill Gray, Chief Executive Officer of the Commonwealth Government's Office of Northern Australia. The office has been given the task of developing Northern Australia, and its work will have major ramifications for the Northern Territory and for the nature of future work.

The Branch is looking at developing a workshop program, made possible for the first time as an on-going activity, by its share of the proceeds from the 8th National Convention held in Darwin 1991.

Judy Watts Branch President

## QUEENSLAND

Queensland Branch has approached TAFE TEQ to assist in establishing a committee to re-develop the subjects being offered by the Kangaroo Point College of TAFE TEQ and the Queensland Distance Education College. The Branch is also concerned about retaining the Records Management subjects in the new TAFE TEQ structure. A certificate of completion for the Records Management course at the above centres is now available for any member who has successfully completed these courses. To receive this certificate, copies of results should be forwarded to the secretary, RMAA (Qld Branch), PO Box 361, North Quay, Queensland, 4002.

Queensland Branch has also designed a new brochure for use in information packs to new members and for promotions/trade fairs. *Michael Hangan* 

Branch President

## SOUTH AUSTRALIA

SA Branch activities have been fairly quiet since Christmas. However, Branch Council was pleased to see an excellent participation in the certificate level course being run at Gilles Plains TAFE College with some 35 enrollments. Helen Francis and Helen Onopko, both members of SA Branch Council are core lecturers for the course.

In March, SA Branch ran a lunch time presentation on "Architectural Records". Thanks to Helen Schoder and staff from Woodhead Australia for an interesting presentation.

South Australian Branch is well represented on the COMTEC Committee this year. Brigitte Stephen is Vice President and Spiros Sarris has taken on the demanding role as secretary. The COMTEC Information Technology Fair is being run at the Adelaide Exhibition Centre from 4-6 August this year, and we are trying to emphasise Records Management systems and software. If you are visiting Adelaide in August, please try to come.

Finally, plans are well in hand for the usual SA Branch Seminar in June. This year our theme is "Quality In Records". We have arranged a number of speakers and it is planned the seminar will be opened by Lyn Arnold, SA Minister of Trade and Industry. Details of the seminar should be sent out in the near future.

Andrew Wood Editor SA Branch

## **BRANCH REPORTS**

## TASMANIA

The Branch has conducted three successful workshops this year. Vital Records Identification Workshop 1/92 is to continue over several sessions to enable participants to identify the vital records in their organisations and prepare a plan to protect these records. Practical Thesaurus Use Workshop 2/92 participants were given practical exercises using several functional thesauri. Disposal Programs Workshop 3/92 participants gained an understanding of the policies and legal requirements of the management of records disposal and the objectives and benefits of a Records Disposal Program.

Debbie Stokell has resigned as Secretary and from Branch Council owing to work commitments. The position has been filled by Eva Horne who has been co-opted onto Council to fill the vacant position. The Branch Council would like to thank both ladies for their valuable contribution to the Branch.

The mailing address for the Tasmania Branch is GPO Box 35A Hobart TAS 7001. As the Branch receives correspondence from other States at various addresses it would be appreciated if all branches could note our new address.

Ian Rumney Office Equipment and Datafile have combined to provide sponsorship for an award of "Student of the Year" to be awarded each year to an outstanding student studying records management at the Hobart Technical College.

The Convention Committee has appointed Conference Design as the professional conference managers for the 1993 National Convention to be held in Hobart at Wrest point Casino between 5-8 September, 1993. The Chairperson of the convention committee is Kathy Holland. The Branch is looking forward to a busy time planning for the convention as well as continuing to provide monthly training workshops and seminars.

Tina Howard Branch President

#### VICTORIA

Since I last wrote a report, the Victorian Branch has been busy giving back to our members. Our new membership is continually growing. This has resulted from a number of initiatives, not the least being the formation of the Local Government Chapter Victoria on November 20, 1991. The Victorian Branch congratulates all the incoming Council on their election to office.

December saw another initiative pay dividends, the first joint Christmas function in a while, for the Victorian Branch of the RMAA, and the Victorian Branch of the ASA. This event was held at the Boardwalk, December 10, 1991, and resulted in a cleaner alliance of the two Associations.

We also held our 2nd State Seminar at the seaside resort of Lorne. All who attended praised not only the quality of the venue, but also the high quality of papers presented. More about the seminar will appear in the next issue of Informaa Quarterly. Papers from the seminar are available from the Secretary,

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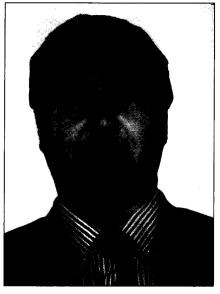


## PROFILE

Graham Dudley, CD, ARMA, has been elected a Life Member of the Association. He is one of only nine Records Managers to have earned the distinction.

His credentials include IRMC Executive Director, immediate past RMAA Federal President, RMAA WA Branch President and Treasurer, and RMAA WA Branch Federal Director. "The Life Membership recognises Graham's outstanding contribution to the records management industry generally and to the Association specifically," Federal President Ray Holswich said.

Association Regulations providing guidelines for the nomination of a Life Member require, in part, that the member should have contributed significantly to



# GRAHAM DUDLEY NEW LIFE MEMBER

education in records management, either through participation in education courses, lectures, or the publication of writings that publicise the profession.

Graham Dudley has made significant contributions in all requirements. A former Royal Australian Navy chief petty officer, he began his records management career in 1973 as a records clerk at Royal Perth Hospital. He later moved to Sir Charles Gardner Hospital and next to Ortex Australia, his present employer.

Dudley joined the Western Australia branch of the Records Management Association of Australia when it was formed in 1982, since when he has been a guiding light in industry development, Holswich said.

"As well as holding many different official positions in the Association, Graham has experienced the era of changing technologies that have dominated our profession.

"He has been engaged in all areas of the profession and has written countless papers on it. Part of this engagement has been the presenting of papers throughout the world, while spreading the philosophies of records management.

"During the past nine years he has held all positions on the WA Branch Council. He has been President for three terms and Treasurer for five terms, as well as Secretary, Registrar, Editor INFORMAA, and Chairman of all Committees, and of course, Federal Director of the Branch for the past eight years.

"During those eight years he has also been fully committed to Federal Council, serving as President for three terms and Vicepresident for five terms. His duty on the Federal Executive has resulted in significant achievements including professional recognition from other information-based associations; and he is held in high esteem by their peers.

"Graham has also been an active force on the international front, where he has served as an International Records Management Council delegate for three years. He was Executive Vice-president for two years and Executive Director for four years. His service to the IRMC has been vital to its continuation and success.

"Additionally, Graham has been deeply committed to many areas of records management training and has written countless papers on our profession.

"We welcome Graham Dudley with the highest regard to his eminently-deserved Life Membership."

His eight fellow Life Members are Bert Brewster, Harry Nunn, Eddis Linton, Cec Partington, Margaret Mainland, Harry Haxton, Jim Shepherd and Peter Smith.

# CHANGE: FIGHTING AN UPHILL BATTLE

Records managers have to respond to 'great expectations' while hampered by a 'dubious status'.

There is no shortage these days of articles about the chasm between records managers and "other" management. The primary reason for this gulf is really no secret. There is a suspicion which may, or may not be founded on reality, that records managers are unable to relate information functions to business functions. This perception persists even though most businesses obviously recognise that they're dependent on information on a day-to-day basis simply to run the operation. Indeed, provide. If anything, given the reluctance to accept the records manager as an equal partner in the executive suite, records management has to be even more businesssensitive than "other" management.

Consider the ongoing debate over centralisation versus decentralisation. The typical discussion on the issue centres on describing the pros and cons of each approach and how much of the decision has to do with philosophical preference or practical efficiency. In reality, of course, those factors are far less important than the real driver of the

centralisation/decentralisation debate: the

Records managers have to respond to 'great expectations' while hampered by a 'dubious status'.

that information is at the heart of all business processes.

This irony puts information managers and systems professionals, even those at senior computer systems level, in a curious position. They have to respond to great expectations on the part of organisations they serve; yet, because of their dubious status, they find it difficult to win the support and resource approvals they need to meet those responsibilities in providing for adequate information resource software. Whatever the reason for the lack of acceptance, records managers must learn to take advantage of prevailing business conditions to effect necessary changes in the services they availability of discretionary funding.

When profits are up, R&D funding goes up, development projects flourish, individual units become more independent. Product or marketing departments inherit management clout within the company. This is simply because funding is available to support those activities.

But when profit margins are thin, development work and product expansion plans get relegated to the back burner. The redundancy of decentralised resources is no longer affordable, and the finance department holds sway.

The records manager therefore finds

much more resistance to centralisation (or integration) proposals during periods of financial well-being than during hard times. By critically considering the company's financial status when determining tactical goals for the year, records managers can have the pressure from financial winds at their back rather than in their face. The strategic goal, of course, should always be to do the right thing. But the best time to do the right thing can vary.

Carrying that thought forward, a typical computerised information strategy may have both centralised and decentralised elements. Implementation will progress with minimal resistance from the boardroom of the user community if the centralised elements are worked in during periods of constrained budgets and decentralised elements in good times. The success of a particular strategy will have less to do with the benefits it offers than with prevailing business conditions.

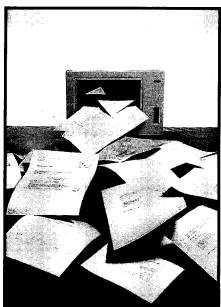
The bottom line to all this is that, fairness issues aside, the records manager needs to keep fighting that uphill battle to educate his or her colleagues about the worthiness of computerised records management application software. At the same time, the records manager must keep a very watchful eye on strategic business conditions of the entire organisation at any given time, and use that knowledge effectively. The rules may be a little different for other information management professionals, but the name of the game is still results.

Graham Dudley Records Manager.

In her article 'Technology - Who's Leading Whom?' Wendy Duggan (1989) suggested that Records Managers (RMs) do not have a satisfactory "state-of-the-art", offthe-shelf software package with which to automate their records systems, because RMs have not decided on exactly what they want or what functions a program must perform. It seemed to me, as an outsider to the records management area, that such a claim would be quite improbable. As an Information Manager I felt that unless RMs are totally inept at communicating their needs to software developers, there must be good, offZyIndex, and Ask Sam.

However, it is important to remember that RMS software available on the Australian market will only run on a limited number of different types of platforms or hardware, as shown in Table 1. Therefore if the RM's organisation already has hardware, the RM's choice of RMS software is usually limited by management to that which will run on the hardware already in existence in the organisation.

Nevertheless, once the organisation's existing hardware requirements have eliminated a number of off-the-shelf RMS



# WHAT MAKES A GOOD RECORDS MANAGEMENT SYSTEM?

the-shelf records management systems (RMS) software available for file retrieval and tracking. Therefore, as part of a Masters program I decided to investigate:

1. What off-the-shelf records management software is available on the market?

2. What are the basic functional and support requirements for off-the-shelf RMS software?

3. Are there packages on the market that meet these functional and support requirements?

#### Off-the-shelf software

Upon investigation I found that there were in excess of 20 major Records Management Systems (RMS) software packages currently being marketed (See table). These ranged from database shells like Inmagic where the RM has to create the fields as well as enter the data, to a complete package where there were already predefined fields and all the RM had to do was enter the data. There were also a number of smaller RMS packages such as: DayFlo Tracker, packages, all an RM has to do is choose an appropriate package that meets the functional requirements of a good RMS software package, as well as the requirements of the organisation. Sounds easy doesn't it? I wish it were! The problem when making such a decision is the lack of standards for RMS software in the industry.

#### Functional requirements and support for RMS software

Despite the amount of software on the market there has been little public discussion or research about what the basic functional requirements of a good RMS package should be. Most of the literature is of the 'How we did it' or 'How we got the right type', which explains next to nothing about the requirements of a good software package. Although the system you choose depends on the particular needs of the organisation, there are also functional requirements that a good system should meet first. In one of the few studies done in this area, Fiona Meyer suggests that the functional requirements of the system include: indexing system, file numbering conventions, classification structures, inverted file indexing techniques, sorting and thesaurus capabilities, language control, user friendliness, bar code interfaces, and document identification (Meyer, 1989, p. 180).

She also stresses that the software suppliers provide adequate training, installation assistance and support for RM staff. Although Meyer's (1989) survey provides useful information on 16 RMS



Karen Horsfall

packages available in Australia, I don't believe her functional requirements for an RMS package are specific enough.

What then are the basic functional requirements for a good RMS package?

## Basic functional requirements for a good RMS package

1. The system must be menu driven for ease of use. Since most RMs and staff have little or no computer experience, it is best to have software that is easy to use. Otherwise staff is unlikely to learn the system easily or be able to search on the system efficiently. Moreover, with a command driven system staff training is much more laborious, than training to use a menu driven one.

2. The software should come with predefined data fields with the ability to modify fields to meet the organisation's needs. This is preferable, as it presents less of a problem for staff with little or no experience in database creation.

**3.** Field lengths should be variable, not fixed. This is of course to save disk space. A fixed length field will take up the space of 20, 50 or 100 characters etc, whether that space is used or not. Therefore, variable length fields, especially for text, is preferable, because it only takes up space it needs.

4. The system needs to be able to manage files/documents throughout their life cycle, that is, from creation to their final disposition. This includes an archival facility that tells one which box the archived file is in and where it is kept.

5. The software needs the ability to Index documents/files in a variety of ways for example title keywords, descriptors, author, subject etc, with the possibility of incorporating an online thesaurus. An online thesaurus would be particularly useful in a decentralised system for indexing or searching terms, rather than providing multiple hardcopies.

6. The system will need automated tracking of active and inactive records with the possibility of a barcode interface. Barcodes enhance speed and accuracy of file

movement, since staff simply wand the barcode into the system instead of manually entering the file number each time the file is transferred/resubmitted.

7. The users need to feel confident that they are going to find whatever file/document they are looking for. Therefore, searching the database should be easy and have multiple access routes to a file/document. At the very least, the system should allow users to search the database by: file/document number, single or multiple keywords/descriptors, and Boolean operators.

8. The system must be able to store and

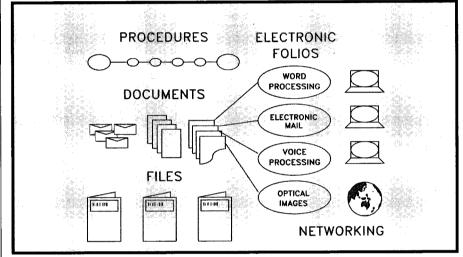
**2**. A 008 number if there is no local representative for support.

**3**. Constant improvements to the software to meet user needs.

Ideally a good RMS package would have all of the above features, but this is unlikely to happen. However, you can hope to find some software that will meet most of these requirements.

#### Software that meets functional and support requirements

Being limited to time and location I was able to look at four software packages on live systems. The RM of each system was



TRIM Records Management System from Tower Computing Services

apply disposal schedules for file sentencing.

**9**. The system should incorporate an online help function for minor difficulties. This would save time by not having to look for, and in, the manual or see the systems officer.

**10**. The package needs to be supplied with an easy to use, well indexed manual.

#### Requirements for support and training

1. There should be a local state office or representative who is available for user training and support. One of the major problems seems to be the vast number of distributors who are located on the east coast, particularly Melbourne and Sydney, who do have a local representative in Adelaide, Perth, Brisbane etc. Consequently, the loss in staff time and money for contacting and waiting for interstate support can be quite appalling. interviewed and demonstrated the system to me. The four systems were:

1. Dossier RMS by Datamation used by a large local government.

2. CARMS by Ortex Australia used by a small local government.

**3**. TCS by Stowe Computing used by a large local government.

4. TRIM by Tower Computing used by a large Commonwealth Department.

#### Summary of findings

I have summarised the four systems in relation to the functional and support requirements (listed previously). It should be noted that none of the systems were just database shells but came with a set of predefined fields.

1. All the systems were menu-driven. Dossier, TCS and TRIM used function keys

PACKAGE	DISTRIBUTOR	PLATFORM	PACKAGE	DISTRIBUTOR	PLATFORM
ARMS	Computer Sciences of Australia	N/A			Prime
CAIRS	Systematics Information Systems	DEC-VAX	Parlairs	Dialog	DEC-VAX
·	0,0000000000000000000000000000000000000	IBM Mainframe	T unun 5	Dimog	IBM-38
		Prime	Recfind	GMB Research & Development	Wide variety
		Data General	Kalliki	Givib Research & Development	including:
					NEC
		Texas Instruments			
		Perkin Elmer			Unisys/Burroughs /Sigma -Data
	Ortex Australia	DEC-VAX			IBM PCs and
		Data General MV			compatibles
		Hewlett Packard 3000 &	Recman	WANG	WANG
		9000 series	Records	Cooper & Lybrand	DEC-VAX
		IBM AS400		Cooper & Lybrand	DEC-VAX
		IBM PC	Management		
		ICL Clan 4,5,6 & 7	System (RMS)	<b>T</b>	DDG
		Minis	Regiment	Intran (Aust)	DEC
		MIPS RIS series	Respect	Aspect Computing	IBM-AS400
		Prime EXL 386			IBM-RT
		RT			Prime
		SCO Xenix			IBM-38
		Unisys 5000, 6000,			(Pic-Based)
		7000 &B series	RMS	Computer Power	DEC-VAX
Collector	Logical Technologies	DEC-VAX			Prime
DBQ-RMS	Information Technology Internationa	l N/A			IBM Mainframe
Dossier RMS	Datamation	WANG			WANG
Eastek DMS	Eastek Limited	Apollo Domain	RMS/3000	Mercury Computer Systems	DEC
Filetrak	File Efficiency	IBM Compatible PCs	RMS2	QCOM	IBM Mainframe
Inmagic Inmagic	•	IBM Compatible PCs			Prime
	11111111111	WANG PC			DEC-VAX
		DEC-VAX			Hewlett Packard
		Microvax			Unisys
Kwoc-It	Ortex Australia	DEC-VAX	TCS	Stowe Computing	IBM AS400
KWOC-II	Onex Ausualia	Data General			IBM-38
		Hewlett Packard 3000			NCR
		& 9000 series			Hewlett Packard ICL
		IBM AS400	TIN-doc	Systematics Information Systems	Computers running the
		IBM PC			following operating
					systems:
		ICL Clan 4,5,6 & 7			MS-DOS, PC-DOS, Unix
		Minis	TITAN/RMS	Infomatch	N/A
		MIPS RIS series	TRIM	Tower Computing	Convergent Technologie
		Prime EXL 386	TRUM	Tower comparing	Sigma Data
		RT			Unisys
		SCO Xenix			Pyramid
		Unisys 5000, 6000,			NCR
		7000 & B series			Sequent
Masterfind	Systematics Information Systems	DEC-VAX			IBM PCs and
Micro Cairs	Systematics Information Systems	IBM PCs and			compatibles
		compatibles	Viewstar DMS	Hisoft Computers	IBM PCs and
MINISIS-RM	Systematics Information Systems	Hewlett Packard 3000			compatibles
NEC Recfind	NEC	NEC Powermate PCs			PS/2s
		NEC XL	Your Records	Spinefix Computing	N/A
Paperchase	Access Computing	IBM PCs and	Management		
-	-	compatibles	System		

for driving the menus or activating actions/functions.

2. Only Dossier had variable length fields. The other three (as I understood them) used fixed fields for such things as file titles.

**3.** TCS and TRIM managed documents from their creation to their disposition. The other two could only tell the user whether a file was active or inactive. They did not have fields to enter data such as where the inactive file could be located or what box number it was in. Furthermore, only TCS and TRIM allowed the RM to enter disposal schedules for file sentencing, an important aspect in the overall management of an organisation's records.

4. All four systems indexed records automatically in a number of ways. CARMS was the most limiting with only the title and the other keywords (descriptors) being indexed.

5. All systems used barcodes and user ID/Numbers to track file movement. With Dossier and TRIM the barcode number and the file number were the same. In CARMS and TCS they were not. It did not seem to make any difference when using the system to track a file. The major disadvantage would be extra work in creating what would seem to be two sets of file numbers — barcode and file numbers.

6. All systems were very easy to search and allowed the user to search in a number of ways, including free-text, keyword, Boolean operators, creation date, subject, and file/document number. Both the TRIM and TCS systems were searched by all staff in the organisation.

7. Both Dossier and TRIM incorporated online help for ease of use.

8. The two manuals that I did get to look at were CARMS and TRIM. These manuals were very well indexed, cross-referenced and fairly easy to read.

9. The biggest problem was related to support and training. Only TCS had an office in Adelaide. CARMS had a local consultant who acted as a support representative for users; the council using Dossier had contracted a staff member from Datamation to provide in-house support for their system; and TRIM offered no support in Adelaide\* which meant the Commonwealth department spent quite a lot of time and money contacting Canberra. Furthermore, none of the distributors/developers had a 008 number to support interstate users.\*\*

**10**. Although a couple of RMs suggested enhancements they would like to see incorporated in the software, all four were



Stowe TCS - - high-tech and easy to use.

happy with the way the developers responded to suggestions for improvements. All four RMs stressed that the developers were constantly updating and improving the software to meet user needs.

#### Conclusions

The most common complaint of RMs and Archivists that I talked to, was that most RMS packages managed the active records very well, but very few managed the storage and archival functions. The other problem was the lack of local support available, and the resultant higher costs involved in automating. None of the RMS packages that I looked at met all the basic functional requirements of a good off-the-shelf software package, as specified in this paper. However, this is only to be expected given the lack of discussion on what basic functional requirements a good RMS package should have. Despite this, there are packages on the market, like TRIM and TCS, that do meet most of the criteria and could be considered

good packages.

However it seems to me, as one outside the industry looking in, that if RMs want offthe-shelf RMS software packages to meet basic functional requirements then they are going to have to vote with their wallets, so to speak. The basic rule is: don't consider or purchase RMS packages that don't meet the basic functional requirements for a good system, and tell the developers why you won't consider/purchase their software. In computing you get what you are prepared to put up with. So RMs speak up!

#### By Karen Horsfall

BA, Dip.Ed., Grad. DipLibrary and Information Management, MBus.(IT).

Karen is employed at the Magill Campus of the University of South Australia, where she lectures in the areas of information management and information retrieval.

\* In late 1991 Tower Computing signed an agreement with Australian Technology Resources (ATR) for technical support of TRIM in Adelaide. Phone (08) 231 8722

\*\* Tower Computing now has a 008 number to support TRIM users: 008 020 149

#### **BIBLIOGRAPHY**

Diers Fred V. (1989) "A Case Study: Fourth Generation Records Management." In Papers Presented at the International Records Management Council in association with the Records Management Association of Australia, 2nd International Congress, Perth, December 11th-14th, 1989. PerthPromoco Conventions for the RMAA. p.279-300.

Eastley, Carol (1988). "Integrated information resources". The Informaa Quarterly. 4, (3), p.15-16.

Hoo, Marita D. and Cowcher, Shirley R. (1989). "Keywords File Title Classification System: a Critique". In Papers Presented at the International Records Management Council in association with the Records Management Association of Australia, 2nd International Congress, Perth, December 11th-14th,1989. Perth: Promoco Conventions for the RMAA. p.367-395.

Kennedy, Jay, Schauder, Cheryl and Rosenthal, Maryann (1991). "Selecting and Implementing a Computerised Records Management System". In Records Management: An Introduction to Principals and Practices. Melbourne: Department of Information Services, RMIT. p.9-1-9-12.

Meyer, Fiona E. (1989). "Survey of Records Management Software in Australia - 1989". In Papers Presented at the International Records Management Council in association with the Records Management Association of Australia, 2nd International Congress, Perth, December 11th-14th, 1989. Perth: Promoco Conventions for the RMAA. p.179-278.

Ridley, Ken (1988). "Towards an Automated Records Management System at the Department of Occupational Health and Safety Welfare, Western Australia". The Informaa Quarterly. 4, (4), p.11-13.



Heidi McArthur

# WHY STOP AT FILES AND FOLIOS?

In every organisation there is a multitude of information in a multitude of formats. As records managers we control a small percentage of the total information holdings of our organisation.

Other examples of information collections in our organisations exist in such places as the library, archives and many other locations, depending on the purpose of the particular organisation. At Australian Nuclear Science and Technology Organisation (ANSTO), for example, the engineering branch holds a large collection of drawings and diagrams. Every organisation will have personnel files, personnel history cards, publications, reports, circulars, newspaper clippings etc, not to mention the wealth of information stored on computers. A true records management program should be capable of managing all the unique information resources of an organisation. I use the word unique to differentiate between material which is stored in records, and material which may be held in the library and can be located elsewhere. Unique information cannot be replaced when lost (as I'm sure most of us have experienced) and is a valuable asset. Without its unique information resources, no organisation would be able to operate, and the extent to which it can retrieve its information resources, can determine how effective it is.

Many of the requirements for the management of these systems are similar to those for managing files. A closer look will reveal that many areas have developed simple databases for the management of this information, which include basic text retrieval and file tracking facilities.

Development of these databases is not an obvious attempt by program staff to 'thwart the system'. They have probably not even considered the fact that a basic records management package could more than adequately meet their needs. However, the existence of these databases presents serious problems for any organisation attempting to effectively control its information resources.

On-going development and maintenance of the databases are usually the responsibility of a 'bright spark' in the area who likes to 'fiddle' with computers and in his (in my experience it usually is a man) 'spare time' develop this system. The bright spark invariably leaves and no-one else knows, or wants to know, anything about it. This is when they look for an alternative. These systems are usually PC-based or access is limited to those in the specific program area. Because they have been developed in someone's spare time they are not usually user-friendly and tend to be command driven. Access to the system requires specialised local knowledge and usually must be directed through one of the program staff. This limits the free flow of information through the organisation.

Development of the database is done on a reactive basis and the databases tend not to be as functional as commercially-produced software. In addition, in any organisation there are probably numerous 'bright sparks', all developing their own database, wasting countless hours on re-inventing the wheel.

Arguments we invariably meet when attempting to sell our services include:

■ Our system has worked fine for years (and years).

■ We don't want anyone else to access our information — it is our information.

What will 'bright spark' do?

■ We don't need all those other things your system has to offer.

And many others.

What most of the comments are really saying is: "We don't want to change, and why should we?" This is where a policy statement is vital, and if the organisation is serious about controlling its information resources, then it will fully support a policy of this nature.

However, for records managers to convince management and users of the need to diversify, they need to have a more flexible approach. For too long records managers have quoted outdated practices and procedures as reasons for particular actions without re-examining the need for such stringent requirements. This rigidity has turned many users away from records. When considering the needs of different information collections it is vital to assess each collection individually and to make allowances for special requirements. If users can see that we are prepared to adopt a flexible approach then they will more likely respond with a similar attitude.

The problem we now encounter, once we have become more flexible, is the rigidity of records management software packages and their ability to adequately cope with different formats, or their ability to separate those different formats from the general file series. Perhaps this is because most packages

managers who were themselves not flexible or user-friendly. However, there has probably been no reason for different records formats to be accommodated, given the limited resources that most records managers have.

## ARCHIVES

The ability to create information in varying formats becomes even more important when we begin to archive that information. Information that, while current, does not require registration and management, suddenly is dumped on the desk and not only are we expected to do something with it, but once we have done so, we are expected to retrieve it at some future date.

Records which may be of archival value (apart from files) include:

Photographs

Visitors books

Personal papers (scientists, senior executives) Maps/plans

Publications (annual reports etc)

#### Cabinet papers

Even with files, quite often, we receive file series not matching our own for transfer to archives. Presently, these files are segregated from files on our database simply because their file number does not conform with a pre-established pattern (eg annual single number). Therefore our archival database is not a true representation of all our archival holdings, and only represents files in particular series.

For example, my organisation has introduced a policy whereby all ANSTO information is, regardless of physical location, to be recorded on the Central Records Database. For such a small organisation (approximately 850 employees) the number of separate filing systems is ridiculous. Our current task is to take all these separate systems and incorporate them on our database.

Naturally, this process entails reviewing

area file holdings, and much of the information is too old to be considered for inclusion in the 91 numbering series. As a result, we are archiving a lot of this information. If we wanted to include this information on our archival database, we would first have to create it in the current database, including the setting up of appropriate numbering patterns, then transfer to the archives database — a process which I consider to be much too complicated.

In order for any archival database to be a

"For too long records managers have quoted outdated procedures and practices"

true representation of all the archival holdings of any organisation it must be flexible and have the ability to cater for many varied formats. You should be able to create, modify and move records in the archives database. The process whereby you have to transfer to the current database to move or modify, then transfer back when completed, is time consuming and unnecessary.

The archives database should be capable of being a system in its own right, like current records and folio management systems, but also able to be fully integrated, if required. It will also have different needs from the current database, and therefore cannot just be copied across.

When we are responsible for records creation, we control the information we

record; we determine what we want to be included in specific fields; and we set our file numbering pattern.

When we receive records into archives these things have already been predetermined and sometimes not very successfully. However, we cannot change these things. We cannot change file numbers to ones that are more convenient or more logical. We cannot sort the papers of a renowned scientist just so they can more easily fit into our rigid structure.

In archives there is a principle of 'original order' which states:

"The principle of original order requires that the original order be preserved or reconstructed, unless it was absolutely clear that there was no original order....."

> Keeping Archives Australian Society of Archivists

Without going into detail, which would require many hours of investigation, things which are unimportant/negligible on the current database may have more significance on the archival database. For example, searching via date range could be particularly useful on an archives database, however of minimal value on a current database, especially when using annual numbers.

A description of a series of records in archives is very important, while non-existent for current records, etc.

The development of a true archival database is not something to be done in five minutes. As with the multitude of records management software packages available, many years of development are needed. However, before we can even begin to embark on that project, there must be a general acceptance of the need for one, and positive input into its development.

#### By Heidi McArthur

Heidi McArthur, Information Records Manager at the Australian Nuclear Science and Technology Organisation (ANSTO), has eight year's experience in records management — she has also worked at the NSW State Archives, Public Prosecutions Office and OTC. She has a Personnel Management Certificate and is an associate member of the RMAA.

# RECORDS MANAGEMENT: WHERE IS THE THEORY?

The first responsibility of a profession is to know itself, which means first, knowing what a profession is; second, knowing what kind of profession it is; and third, knowing what differentiates it from all other professions (Shera 1966, p12).

One of the major problems facing today's records manager is one of professional identity. Records management has traditionally been a practical rather than a theoretical occupation, reflecting the general management view of the importance of the area to an organisation. Many traditional records managers have risen to their position by hands-on experience over a number of years. They often overhauled antiquated systems and introduced modern concepts and technology, but they were not often included in the professional ranks of an organisation. However, over the past few years changes in technology and organisational structure, as well as regulatory requirements, have led to a recognition by professionals from a number of fields, that records management could be a viable career path for them.

Public attention has been brought to the importance of companies' record-keeping by recent publication of the enquiries of Royal Commissions throughout Australia. In Western Australia in particular over the past few months, we have read daily of the problems of poor records management practise. Records have been changed, documents removed from files, also tonnes of non-classified or indexed materials have been deposited for inspection by the officers of the Commission. Organisations have viewed records management as a regulatory necessity for the storage of materials no longer required on a day-to-day basis, the province of the filing clerk. It was thought that as long as the documents were kept somewhere for the



June Caunt statutory period, the letter of the law was being followed.

From my own experience I have seen years of documentation stored in overflowing boxes in a rat-infested warehouse. When a taxation audit was imminent the importance of the documents was suddenly realised. On examination the boxes were found to contain the contents of filing cabinets, including the suspension files, complete contents of desks from retrenched employees all with the in and out trays full of documents as they had been on the day the person left. There was no form of records management in the office, in the store there was chaos.

This out-of-sight, out-of-mind mentality

persists, but some organisations do recognise the worth of records management to the decision making process, and the emphasis has changed to quality control in the indexing of material for retrieval purposes, with a consistent management of records from creation to disposal. However, for prospective employers wishing to install an effective record administration system there is a problem: What is a records manager what differentiates this profession from all others?

It is recognised that records management is a profession. We are told that the Emperor Justinian decreed that public buildings would be made available to store records, and for a person to have custody over them. The Greeks also kept their important records just as carefully. Throughout Europe this practise was continued until the present day. However these were depositories in the archival sense. Records management as we recognise it as the control of a document from conception to death is a more recent concept (Benedon, 1966).

A more recent example of a profession that offers its skills in the service of the public was cited by Pemberton (1987) by the use of the techniques of records management in ensuring democratic elections in El Salvador. In 1984 and in Western Australia, in 1991, we were made aware daily of the importance of records keeping to the furtherance of public accountability at the Royal Commission into WA Inc., but there appears to be no recognition of the qualification that differentiates the records manager from other information professionals.

Applicants for any position offered in the field may range from the experienced filing clerk to the systems analysis graduate with units in records management. To stipulate that an applicant should be a member of the RMAA is equally useless. In the Annual Report of the Association published in INFORMAA Quarterly, February 1992, it stated that only three per cent of the membership, or 15 persons throughout the whole of Australia are designated 'members' others are at Associate or Ordinary (inc. Student) levels.

The Records Management Association of Australia was founded in 1971, with a major initiative to provide formalised education to people wanting to enter or update their skills in the field (Lovett, 1987). Vocational courses have been held from time to time by bodies such as the Business Archives Council of NSW and government departments (Coggin, 1987; Kreiberg, 1986; Linton, 1988).

Generally there was no recognition of the value of education in the field by educational institutes, (Lovett, 1987). The first formal course was offered at the Sydney School of Commerce in 1971, (Lovett, 1987). Now, although some form of records management education is offered in all Australian States, there are problems with finding suitably qualified teaching staff and with a dearth of publication in the field (Thin-Smith, 1989).

"Scholarship for a profession must bear some relationship to what is done by practitioners" (Shera, 1966). This would seem an obvious statement. Yet despite being in existence for over 20 years the RMAA is now expressing concern over the accreditation of courses that are on offer, and their ability to provide skills in records management. This is not surprising. In some States, the courses have been designed without the institution liaising in any way with the local State branch of the RMAA.

Is it surprising then, that although there has been a steady increase in the provision of education at both graduate and practitioner level (Kirk, 1989), there is no consistency in what is actually being taught? A recent survey by MAP Research (1992) showed that only 41 per cent of the membership of the RMAA have professional qualifications, and that those qualifications are diverse, ranging from Librarianship to Applied Science.

According to Acina (1990 p.34) "...records management skills are becoming increasingly important in the modern business and government environments." It is the multifaceted nature of records management that has attracted the different professions. Office automation attracted professionals from the computing area (Smith, C 1986), and increased legal and fiscal requirements brought experts from those areas to the field (Emmerson, 1990). It was often assumed that I, as a Special Librarian could manage the records as part of the library without any further training. So we have the traditional records manager, the librarian, the archivist, the systems analyst and persons trained in business management, vying for recognition as records manager (Diers, 1991).

The initiative by the NSW TAFE to

of records management those skilled in these professions pursue goals in their own discipline. Some are heavily involved in the management aspect, others in the hardware and software.

There are differences not only with variations in disciplines, but also the level of award which qualifies a person as a records manager.

If the professional education is still going to be offered in a variety of disciplines, how can a prospective employer recognise a

# "One of the major problems facing today's records manager is one of professional identity"

have a nationally recognised core course in records management is to be lauded, but what will this mean to the professional aspect of records management? Usually a professional is recognised from the degree awarded by a university, not a certificate from TAFE. While there is a need for consistency in the teaching of technical "knowhow", there is also the need for consistency at the professional level. Before records management can be recognised as a discrete profession there is a need to know "...what differentiates it from all other professions" (Shera, 1966). There must be some discrete theory of records management.

The results of the survey published in INFORMAA (February 1992, p.4) showed that only 41 per cent of the membership of the RMAA have professional qualifications. Those who have qualifications gained them in the areas of Libraries, Business, Applied Science and Information Management. While each of these disciplines reflects some aspect discrete qualification as being that of a records manager? The professional records manager needs to pursue the goals of records administration. To do this a consistent theory base need to be developed in the discipline.

Elements of this theory would have to reflect the multi-skills required in the practise of records management. Therefore a study needs to be made of the many theories in the knowledge backgrounds of those professionals attracted to the area.

Records management is a part of the larger field of information management. Theories relating to all the areas need to be examined for their relevance to the records management scenario. The theories of librarianship in classification, indexing and thesaurus building are obviously applicable to file control. But how do they need to be refined for records management purposes?

The archivists have the principles of provenance (collections from different CONTINUED ON PAGE 23

## **BRANCH REPORTS**

### **CONTINUED FROM PAGE 9**

GPO Box 2270U Melbourne 3001, at a meager cost of \$25.00.

Like all good seminars, a dinner was held on the eve of the actual seminar. Whilst the dinner itself was quite a cordial event, the after dinner entertainment definitely sparked up the evening. Entertainment was provided once again by our own State President, David Moldrich, who lit up the keyboards at the Horizons Bar. Ah, but David was not the only one to entertain — a certain representative from Scotpac harmonised with a certain songbird from Melton to continue the entertainment through the early hours of the morning. Obviously, a good time was had by all.

Education once again surpassed expectations with a record 27 participants enrolled in the Principles unit at Prahran College of TAFE. Other institutions report a healthy number of participants in all courses.

Membership problems in Victoria have been sorted and receipts and accounts for the 1992/93 year will be mailed out soon.

Keep an eye out for news regarding the upcoming AGM to be held in July 1992, as this promises to be another event not to be missed.

#### R Kaczynski ARMA State Secretary Victorian Branch

## WESTERN AUSTRALIA

The WA Branch has recently tackled several important issues affecting records management.

One is the Freedom of Information

legislation soon to be proclaimed by the WA Government. Branch Council has written to the Hon. David Smith Minister for Justice, via the Premier, offering assistance in implementation and any training that will be required. Receipt of our letter has been acknowledged. We will be kept informed and called on to assist wherever possible.

Another issue is the submission to Administrative or Decision Making Procedures as part of the Royal Commission into Commercial Activities of Government. A meeting was held and a sub-committee formed. It met several times to prepare a draft document which was circulated to members for their comment. A report was prepared and forwarded to the Royal Commission on 31 January 1992. Council wish to thank all participants who prepared the document, especially Neil Granland. Roley Sharpe and Ken Ridley of the sub-committee.

200 delegates attended a 'Records and the Law' seminar held 31 March, 1992 at the Alexander Library. An excellent programme of speakers commenced with the opening keynote address by the Chief Justice, Mr David Malcolm.

The Minister for Justice, the Hon. David Smith spoke about the difficulties in trying to obtain information under the Commonwealth Act. He outlined instances in which his organisation spent several months and many dollars unsuccessfully trying to obtain information.

Kandy-Jane Henderson (Convener), Neil Granland, Janine Douglas and Roley Sharpe, of the Records and the Law Committee, worked hard for several months and are to be congratulated on organising an excellent seminar.

At the March meeting, members were taken on a tour of Australia Post's Central Mail Exchange. They were shown the latest technology in mail sorting - optical reader recognition.

The April meeting, postponed until May 7, was held at DBE. Members inspected the latest facsimiles. A demonstration showed facsimile capabilities, including networking.

The May meeting will be held at Castledex on Tuesday 19 at 3.30pm. Members can inspect storage systems and the KolorKode filing system.

The Annual General Meeting will be held at the Dept of Mines on Tuesday 21 July 1992 at 5.30pm. The Hon Phil Pendal MLC, member for the South Metropolitan Region, Shadow Minister for Cultural Affairs and other Portfolios will address the meeting by discussing the Freedom of Information legislation.

Branch membership has increased by 12 members since January due to some solid promotion by Jim, Bonzas. Well done Jim!

An education Committee has been formed and meets regularly. Maggie Exon, Chairperson, is assisting the Branch Council in studying the Privacy Act. David Tinsley is the new editor of the WA newsletter. He has published one edition with the second on its way. Congratulations David!

Norma Easthope Secretary, Western Australia Branch

## EDITORIAL COMMITTEE WANTED URGENTLY

One editorial committee for INFORMAA Quarterly. Committee should comprise of four members. Expressions of interest can be submitted to: Judy Watts Federal Secretary GPO Box 293 DARWIN NT 0801.

## **CALL FOR PAPERS**

Members of the Records Management Association of Australia and other interested persons are cordially invited to submit papers for publication in all future editions of INFORMAA Quarterly. Deadline for next issue (August) is July 15, 1992. Papers should be forwarded direct (at this stage) to:

Media Focus PO Box 245 GLADESVILLE NSW 2111

## EDUCATION

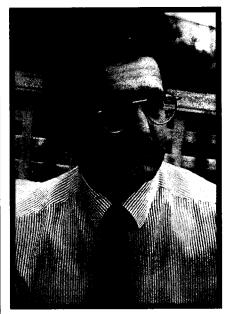
# RNAA HAS ITS SAY

The University of Canberra proposes to offer a course in "Information and Records Management", possibly from the beginning of Semester 1, 1993.

The proposal is for a six unit major in Information and Records Management, contained within the Bachelor's degree programs in Office Management, Library and Information Studies. It will also be available to other university degree programs. The major has been jointly developed and will be jointly staffed by the academic disciplines of Office Management and Library and Information Studies. For the purposes of the university educational profile, the major is within the broad field of Arts, Humanities and Social Sciences. The major will be administered by the Faculty of Communication jointly through the disciplines of Office Management, and Library and Information Studies.

I was privileged to represent the Records Management Association at a Course Advisory Committee meeting in Canberra on Thursday, 19 March of this year. I say "privileged" as I believe it is probably one of the few times, if not the first, the Association participated at the university level as far as course comment is concerned. I trust it will be part of an increasing trend wherever and whenever courses and curriculum are under review. As well as those putting the course together, others present represented practising records managers, archivists, librarians, students, and lecturers in Information and Applied Science.

A copy of the proposed curriculum was forwarded to participants prior to the meeting. This obviously provided ample time to read and formulate questions on the course content etc. In addition to invited questions, the chairperson, Dr Belle Alderman, also directed key focus questions which were aimed at specific participants. Examples are:



Dennis Wheeler, Federal Education Committee RMAA

1. From the professional point of view how does this development meet the need to provide education/training in information and records management and how does it fit into other courses offered in Australia? (RMAA)

2. As a student completing the present two records management units and as a practising librarian, how do you foresee the links between the information professions, records management and Librarianship and potential interest in undertaking the major within degree courses? (Student)

3. Many students in Library and Information Studies and Office Management undertake various computer studies in their degree program. What do you see as the most marketable combination from your faculty (Faculty of Information Sciences and Engineering) with the IRM Major? (Senior Lecturer in Information Systems)

The above were just three of seven indepth questions which led to further stimulating conversation and comment/criticism/agreement with, and on the proposed course.

The invited questions related to course content, advanced standing, the order of certain topics or streams, unit names, problems with field placements etc. One interesting aspect that was raised was the mobility between careers. It was agreed that courses such as this are a long overdue step in the right direction - a link between the converging technologies. An aim of the course development committee was to develop a major which would enhance career prospects of information managers. It was felt that this could be accomplished by facilitating movement between related branches of the information professions such as records managers, archives, and librarianship.

The value of the inputs received on the day are perhaps best expressed in certain actions that were listed as follows:

■ the course curriculum document will be revised;

■ contact with RMAA will be maintained to acquire guidelines and standards under development;

■ short courses and consultations will be considered where appropriate;

■ and the flow through of students to Honours, Masters and PhD courses will be encouraged.

Prospective students or others interested in obtaining any further details should contact:

Dr Belle Alderman

Head of Division of Information, Language & Culture Faculty of Communication University of Canberra Telephone: (06) 201 2062

CONTINUED OVERLEAF

## **PRODUCTS AND SERVICES**

## **EDUCATION**

### ACCREDITATION

Following my comments on accreditation contained in the last issue of this Journal, I will be meeting a representative of ALIA in late April. Hopefully, this will be the first of many meetings at which we can discuss problems being experienced in accreditation, and of relevance to information managers, particularly those in the Australian Associations — Records Management Association of Australia, Australian Library and Information Association and the Australian Society of Archivists.

#### **NATIONAL TAFE COURSE**

A submission put forward by the Computing and Information Services Training Division of TAFE (NSW) Commission has been successful in obtaining funding from the Australian Committee on Training and Curriculum (ACTRAC), to develop training in the area of records and information management.

Peter Smith, the Industry Specialist, Information Services for the Computing and Information Services Industry Training Division, and a member of RMAA Federal Education Committee, is putting together a National Committee to address the needs of this National course.

The obvious advantages of such a course will be: recognition of the records management profession, standardisation of course material, and portability for those people moving interstate.

This is a real and tangible breakthrough in education and qualifications recognition for our profession, the records management profession, and the Association, RMAA. *DG Wheeler* 

Chairperson

Australian Archives has announced market availability of three papers suitable for long-term records.

The Australian-made papers meeting archival specifications are: Perpetuum Wove, Perpetuum Copy and Reflex Archival.

The Australian Archives has responsibility under s.5(2) of the Archives Act 1983 to ensure the preservation of Commonwealth records. In pursuit of this objective, in 1990 the Archives issued two specifications for papers suitable for long-term records: 1990/1 Permanent Copy Paper for Use in Records; 1990/2 Permanent Bond Paper for Use in Records. At the moment, no imported paper has been warranted by its made to Australian Archives specifications, is specially formulated for long term preservation under archival storage conditions.

Reflex Archival is 80gsm copying paper and is considered by Australian Archives as being a superior copying paper for records to be retained for longer than 10 years. It is suitable for doubleside, high-speed copying and can be used with standard and high-volume/highspeed photocopiers and office laser printers as well as desktop publishing.

The use of this paper improves the conditions of long term records created on it while ensuring low preservation costs. Utilisation of the paper also contributes to the protection of the natural

# PAPER THAT LASTS

manufacturer or distributor as satisfying the requirements of the specifications.

Perpetuum Wove, which satisfies 1990/2 is available on Commonwealth Department of Administrative Services Period Contract 19/11473Y-1. Price per ream approx \$6 (minimum order 5 tonnes).

Perpetuum Copy (satisfies 1990/1) is available on Commonwealth Department of Administrative Services Period Contract 19/11473Y-1. Price per ream approx \$6 (minimum order 5 tonnes). Perpetuum Copy is substantially the same paper as Reflex Archival.

Reflex Archival (satisfies 1990/1)

environment as less energy and water are required for its manufacture. Industrial waste fibre (cotton liners) is used instead of wood pulp.

Reflex Archival paper is available in small quantities or in bulk from The Paper House and from Edwards Dunlop & BJ Ball.

The price of the product from both companies is: \$7.43 per ream — minimum purchase 6 reams.

For further information:

Storage & Preservation Section, Australian Archives Central Office. Telephone (06) 209 3927 or (06) 209 3928, or fax (06) 209 3693.

individuals or organisations must not be mixed) and original order (the order in which the records were created, maintained or used must be respected). In records management however, the emphasis is on the life cycle of the records and its eventual disposition, not on permanent preservation.

Because of the need for records managers to communicate with the executive, it is important that current thinking in business management is understood. Many of the theories from this area are applicable: these include the time and motion studies (Scientific Management Theory) of Taylor and Gilbreth, the behavioral theories of Hertzberg, Maslow & Mayo, and the various theories of systems organisation (Senn, 1990).

The rapid advances in automation of the records management process, and the electronic data that is becoming part of the collections, requires an understanding of computer theory and practise, especially when dealing with vendors.

It must be remembered, however, that

all the theories that are being taught as part of records management education are those developed by practitioners from some other discipline. Discrete theory for records managers must be developed so that education at the professional level is consistent and recognisable both to the practitioner and the prospective employer.

Currently I am looking at these problems as part of a Masters thesis I am writing for presentation to Curtin University WA. I would appreciate any comments so that the thesis may reflect current thinking in this area.

#### By June Caunt

June Caunt works at the Australian Government Analytical Laboratories and INBIS Australia (Industrial and Business Information Services).

#### REFERENCES

BENEDON, William. 1982, Records Management Administration Independent Study Course. IRMC

COGGIN, Christopher. 1985, 'Records Management at the Crossroads; Professional Education in Western Australia,' in INFORMAA Quarterly 1(4)pp.9-11. DIERS, Frederick V. 1991, `In Search of a New Information Professional,` in GEN, 11(8)p.13

EMMERSON, Peter, 1990, 'Computer Generated Records: Some Legal Aspects,' in INFORMAA Quarterly, 6(2)pp.29-33.

KREIBERG, Dale. 1986, 'Growth Through Education,' in INFORMAA Quarterly, 2(2)pp.18,23,27.

LINTON, Eddis. 1988, 'Letters to the Editor' in INFORMAA Quarterly, 4(2)pp.8-9.

LOVETT, Tom. 1987, 'Records Management Association of Australia: History Highlights,' in INFORMAA Quarterly, 3(4).

MAP Research. 1992, 'Membership Survey'. INFORMAA Quarterly, 7(1) pp.3-5.

O'CONNER, Kevin. 1990, 'Information Privacy: Australia and International Trends,' in INFORMAA Quarterly, 6(2)pp.34-36.

PEMBERTON, Michael and RENDERGRAFT, Lee O. 1990, 'Toward a Code of Ethics: Social Relevance and the Professionlisation of Records Management' in ARMA Quarterly, April, pp.3-15.

SENN, James A. 1990, Information Systems Management. 4th Ed. Wadsworth CA.

SHERA, Jesse H. 1965, Libraries and the Organisation of Knowledge. Chesire, Melbourne.

SMITH, Chris. 1986, 'The Changing Role of Records Managers; Computer Power', in 3rd Annual Conference Records Management of Australia, S4.1-4.5

THIN-SMITH, Tam. 1989, A Report on an Investigation of the Records and Information Management Industry and Vocational Education in the UK. TAFE, NSW (Microfiche).



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Public concern for the environment is at first glance perhaps one of the least likely issues in the current condition of the world which would be of central concern to the information manager in large or small organisations. There are plenty of other contenders for the information manager's attention:

■ the explosion of technological influences on information systems and record formats;

■ the multiplicity of possibilities to manipulate information from existing sources and new databases; its services, and among them will be objectives arising out of their concern for the environment. Information managers will need to be able to deal with this public concern in relation to their professional responsibilities quite simply because their clients will expect it of them. Given the level of that concern, the consequences of not dealing with it professionally could be substantial to both the organisation and the industry.

But first let us consider what issues we are really talking about here and why public concern is at such a level. dust, dirt etc, or the social and behavioral aspects of our fellow workers — sometimes we mean all of these).

The information managers who deal with public concern about the environment need to know in each case how the term is being used, because it will have varying relations to their professional concerns. For example, concerns about the workplace environment can have a direct connection to the technology used in modern information management: photocopiers produce ozone. Ozone in its right place in the stratosphere

# THE ENVIRONMENT AND THE INFORMATION MANAGER



Stephen Ellis

protects us from UV radiation, but in the office it is hazardous to human health. Ozone also promotes deterioration of paper and of other materials from which records are made, such as the plastics on which computer tapes are based. All of these points impact on information managers in a complex way.

Why should information managers care about issues which are, on the face of it, well distanced from their main responsibilities and in many cases their main professional training? Aside from any personal concern information managers may have about environmental issues themselves, there are substantial professional reasons why these public concerns must be taken into account.

the decreasing unit cost of information systems matched with vastly increased capabilities of manipulation and the sheer volume and variety of available information;

■ the continuing challenge facing all managers of being expected to achieve more with fewer resources while maintaining or improving service quality to clients, both internal to the organisation and external.

But it is this last challenge which is most likely to make public concern for the environment one of the central concerns of the information manager, because the information manager is working in a service industry. The customers of that industry will have multiple objectives to achieve in using The term 'environment' is on virtually everybody's lips, but it has a range of meanings, or at least a meaning with a number of different levels of application.

What is our "environment"? We can use it as a term to cover a room, building, city, country, the air, land and water around us, even the stratosphere well above us, the entire biosphere of the planet. We use it metaphorically also, when referring for example to a "social environment", the "home environment" and so on — even ambiguously when we refer to the workplace environment (what do we mean? Just the air in the air conditioning system, the amount of

Not the least is that if well informed, professional advice is not made available, clients will act upon uninformed and unprofessional advice and will be convinced that the error lies on the part of the professional, not theirs.

Concern for the environment and its responsible use can be traced back through the sanitary laws of virtually every great civilisation we know, but it is the degree of concern today that attracts our attention. Environmental concerns are now of substantial political significance in most modern industrialised nations. Environmental and conservation pressure groups in Australia have hundreds of thousands of people in their active membership - more in many cases than the active membership of some of the major political parties. No doubt there are many cross-memberships, but this concern has naturally had its reflection in practical politics.

Government at all levels has responded to environmental concerns with a range of policies and proposals. A few examples at the federal level illustrate the point:

■ in 1989 Department of Industry, Technology & Commerce inquiry into overseas pulp mill effluent technologies;

the funding of the CSIRO research program into pulp and paper technologies;.

■ the 1989 Department of Administrative Services review into the potential for use of recycled paper by the Commonwealth, which was published in 1990 as the Guide to the Use of Recycled Paper;

■ the 1991 DASETT Industry Roundtables on Waste Minimisation and Recycling, which resulted in the National Strategy for Waste Minimisation and Recycling, recently issued for public comment;

■ the Australia/New Zealand Environment Council National Greenhouse Strategy

■ the recent announcement of the establishment of a Federal Environmental Protection Agency within DASETT.

Similar initiatives can be repeated for each State and for many

local government bodies.

the New South Wales government's rebate scheme for local government recycling ventures;

■ the Victorian government green-spot campaign identifying 'environmentally friendly' products.

■ and, more recently, the recycling strategies of the ACT, Queensland and Northern Territory Governments.

The reason for this concern at both the grassroots and the political levels is not simply the increase in world population but more particularly, the dramatic increase in the rate of human impact on the environment since the Second World War, itself attributable to the dramatic rate of increase in technological change. For example, the average time for an invention or principle to be developed from conception to commercialisation declined from 37 years at the turn of the century, to 24 years between the wars, to 14 years from the Second World War to the 1960s. The steam engine took over 100 years to develop from the discovery of its first principles; television took barely half that time (Landes 1969). The consumption of chemicals has increased hundreds and thousands of times the levels common at the end of the Second World War - a rate of increase greatly exceeding the rate of growth population (Commoner 1971).

This impressive change in circumstances and in public awareness presents the information manager with a number of opportunities and challenges. Out of the technological development itself, of course, have come most of the modern tools of the information industry: the oldest of those tools -paper-presents the biggest challenge.

For, despite the multiplication of forms of information technology in the past generation, the significance of paper in the modern office has continued in volume and variety. The predictors of the paperless office have had only patchy success — the volume of use of paper has continued to grow as the growth in the use of computers has been matched by the spread of photocopiers and the multiplication of opportunities to produce new information by manipulating sources on computers themselves.

The recent British publication Information UK 2000 (Martin 1990) estimated that over 93 per cent of information is still held in paper format. The German chemical company Hoechst, developers of the magneto-optical disk, similarly estimate that 95 per cent of current information is still on paper. The per capita consumption of paper in advanced industrial countries has risen steadily since the second world war and continues to rise. In the USA, where David

"Environmental concerns are now of substantial political significance"

Bearman, editor of Archives and Museum Informatics, estimates that 90 per cent of current US government information is in electronic format, per capita consumption of paper at 340kg is more than 1.75 times the level of per capita comsumption in Australia, which is 11th in the world consumption of paper (Appita 1990).

So the rapid and increasing extension of ADP technologies in the information industry is not simply displacing paper as a tool, but is multiplying and varying the applications to which it is put. Indeed, the most recent area of development in the information industry, the rapidly diversifying and expanding imaging technology based on optical disks, is

virtually predicated on the continued existence of paper, and the paper document, as an integral part of the information process.

Paper continues then to be of concern to the information manager and paper is also of major concern to those interested in the human impact on the environment. The concern of information managers is to ensure that the paper used in their organisations will perform its information purpose satisfactorily. This may require it to perform predictably in printing and copying machinery, and to last in a durable form over a long time. The concerns of environmentalists are different. At almost every level of meaning of the word "environment" which we identified earlier, paper has potential links to current environmental issues:

■ at the atmospheric level — because most modern papers are made from cellulose derived from wood, the impact of exploitation of forests and the consumption of energy in papermaking has a bearing of global CO2 levels and global warming;

■ at the local level — the demand for water in the papermaking process and the biological oxygen demand placed on water systems by the bio-degradable wastes from papermaking can have substantial local environmental impacts;

■ in the food chain — the chemicals used in bleaching pulps and the concentration of minerals and salts in waste water from other parts of the papermaking process can have polluting effects unless carefully managed.

These are all areas where the major environmental pressure groups have expressed their concerns and governments at all levels are responding to those concerns. Both the concerns and the responses impact on the information manager through the promotion of paper recycling and the use of recycled paper products in the office. To deal effectively with that impact and to provide their clients with fully professional service, information managers have to have well founded knowledge about papers and a clear understanding of the purpose of using paper as an information tool.

The major environmental pressure groups have produced valuable contributions which are of direct assistance to the information manager in dealing with such environmental concerns. In particular I refer to products such as the office waste paper recycling guide, Office Paper - Recycle It, developed by Friends of the Earth for the NSW Waste Management Authority in 1990; the Greenpeace Guide to Paper, and the Australia Conservation Foundation "Green Workplace" video.

The experience of the Commonwealth government in trying to reconcile the concerns of information management with concern for the environment is, I think, instructive as an example of the typical issues which will arise in most information management situations.

The Commonwealth's main use of writing and printing papers — what are called fine grade papers — is to create records and publications of various sorts. The amount spent on this activity per year is in the tens of millions of dollars, but if you add on the salary and other costs of the public servants who use the paper to create the records, the annual investment by the Commonwealth in this area of information management is undoubtedly in the order of billions of dollars.

About 75 per cent of this annual production of records has ceased to be of any further use, either to the Government or the community within 10 years, and they can be destroyed and the paper recycled. About 28 per cent needs to be kept for more than 25 years, and roughly seven per cent or less permanently. These longer-term records represent a long-term investment by the Commonwealth in the value of the information embodied in them, and that investment justifies using high quality paper in their creation which will last the length of time they will be needed.

The key to understanding this relationship between the quality of a paper and how long it will last lies in understanding

the nature of paper and why, and how, it deteriorates over time. All papers are complex mixtures of various chemical compounds, the principal common ingredient being cellulose fibres of 2-5mm in length. There are various ways of deriving the cellulose fibres from natural resources such as wood, cotton, hemp and so on, and there are various other materials, such as sizes. brighteners, dyes, coatings, and so on which are added to the recipe to make a paper with particular performance characteristics. Many of these chemicals and many of the production processes are acidic. This is significant because cellulose is a material which tends to break down in an acidic environment more quickly than in a neutral or slightly alkaline environment.

We now know that the major cause of the deterioration of most 19th and 20th century papers is the acid within the papers themselves. As paper manufacturers move for economic and environmental reasons to alkaline production processes, this feature of modern papers can be expected to diminish. But there are still substantial sources of acidity in many papers and the only way to ensure long-term stability is to design paper with as pure cellulose fibres as possible and as little added chemicals as possible.

Electron-micro-photographs of the structure of a piece of paper show quite graphically what happens when paper deteriorates. In Photo 1 you can see the cellulose fibres quite distinctly, and the way they are matted and interwoven to form the paper sheet. Photo 2 shows you a similar view of a deteriorated piece of paper: you can see that the bonds holding the cellulose fibres have broken down, the structure has totally changed, and the physical relationship of the various components has also changed.

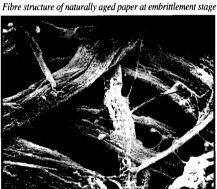
It does not take much imagination to appreciate the consequence of using lowgrade papers for long-term records. The records of the First Fleet, if created on lowgrade paper, would have crumbled before Henry Parkes made his famous federation speech at Tenterfield in the 1800s. The

records of the post-Second World War immigration to Australia created on wartime recycled papers, are approaching a similar condition right now. Additional factors affect the deterioration of recycled papers, and their suitability for various information management purposes. Some recycled papers are produced through an alkaline process, and so are not prone to the acidic decay characteristic of modern acidic process papers. But many recycled papers also retain inks and other impurities which diminish their chemical stability over time. Continued presence of other contaminants such as latex or glue residues also affects their suitability for machine purposes. For these reasons the DAS guidelines promote the use of recycled papers for records to be kept less than ten years, and higher quality paper only for records to be kept longer than 10 years.

While we know a lot theoretically about how and why paper deteriorates, and we have a lot of practical experience with using and trying to preserve paper records, the fact is that there is still a lot we do not know about the papers the Commonwealth spends over \$55million a year on buying. The specifications developed by the Archives and the Purchasing and Sales Group of the Department of Administrative Services for paper purchases are the first to address the complex concerns of responsible use of natural resources and long-term preservation, but we do not know, in fact, how consistently producers have been able to meet those specifications. Standards which establish the various categories of performance to be expected of different grades of paper simply do not exist, either in Australia or internationally. Many other basic issues, such as how to test conclusively the predictable performance of various papers remain to be established. The Archives is continuing its work in this area.

A clear understanding of the role of standards for paper is essential for managing the environmental concerns in this area. Standards come in various types and perform various functions. Some establish in precise detail how products are to be tested to determine whether they meet certain specifications. Others define terms, practices or procedures to be followed in production process, or establish codes of conduct for certain activities. All standards fit into a system of quality assurance which is aimed at ensuring certainty for both industry and consumers. In this Total Quality Management approach, quality is defined as "fitness for purpose". An important part of defining fitness for purpose is the





*Fibre structure of new paper* establishment of a standard.

But it is very important to understand how standards are made. Most advanced nations have standards organisations. In Australia it is Standards Australia or the Standards Association of Australia. The International Standards Organisation and several international specialist bodies such as the International Electrotechnical Commission also develop standards which are used in Australia.

In all of these bodies standards are essentially produced by a process of discussion and negotiation carried on in technical committees between representatives of industry, relevant professions, consumers and, in some cases, government. All draft standards are produced by members of the committees because none of the Standards bodies have independent resources. Adoption or confirmation of draft standards results from voting by members of the Standards Organisation as a whole. In this system, the interests of consumers are naturally disadvantaged, because their representatives usually have fewer resources to invest in standards development, and less technical knowledge about the subject of the standard. In this situation the role of the independent professions and of the government representatives is crucial to redress the balance on the committees, and in the Standards Organisation as a whole.

Standards for papers are not as well developed as other products. While various standards exist in a number of regimes which prescribe tests for performance, few at present define fitness for purpose of qualities of paper produced. In some areas, there are no established definitions. For example, at the request of the Federal Department of Administrative Services, Standards Australia has only this year established a technical committee to address the question of defining terminology to be used for "recycled" papers. Specifying the characteristics of the actual product could be expected to come much later.

Standards Australia is about to issue an interim standard for a paper with high longlasting qualities, as is the International Standards Organisation. But in this whole area, definition is difficult because of confusion of terminology which has grown in the English language since the issue of the earlier American standard for permanent paper (ANSI Z39.48 [1984]). Thus the American standard, the interim Australian standard, and the proposed ISO standard use the common term "permanent paper", despite the fact that all three standards permit the presence of paper components which are known to diminish the chemical stability over time and which presumably would therefore

diminish the "permanence" of the paper. The ordinary consumer, is to some extent, reliant on the apparent value of a standard, but the professional information manager should know the substance of the issues relating to paper quality and not be in the position of having to rely on any salesman's pitch.

For papers used in information management, the characteristics which determine how a paper will perform for a particular purpose are:

- chemical stability
- durability and

opacity and brightness, which are specific to print quality.

Each of these characteristics is affected by the basic composition of the paper and how it was made. The chemical stability of a paper is determined by the quality and purity of the cellulose fibres used in it and by the extent to which non-fibrous components which promote deterioration processes are present. Durability is the ability of a paper to retain its original physical strength properties. It is determined by the strength quality of the fibres and by the processes used in manufacture of the paper.

Paper which is intended for use in a modern office machine such as a photocopier or laser printer has substantial strength requirements. If it is being put through those machines for the purpose of creating records which will be needed for many years, then it also has a requirement for substantial chemical stability and durability over time. The fibre strength of papers produced for such office purposes is usually greater than that of papers produced for other purposes. Office waste paper is a valuable source of recyclable fibre for a number of "downstream" products. Damage caused to the fibres by re-pulping and refining, alters the strength of fibre by 50 per cent each time it is recycled. For this reason, the use of 100 per cent recycled fibre papers for purposes with a substantial strength requirement, such as photocopying or machine printing, has been limited.

The push to extend the use of recycled papers has led to improvements in papermaking techniques in the past two years which have enabled Australian paper manufacturers to market fully recycled copy papers which perform satisfactorily in this respect. However, there is no recycled paper available which provides the chemical stability and durability required for long-term records. For this reason the Commonwealth's guidelines on the use of recycled papers recommend that recycled papers only be used for records with an expected life of 10 years or less.

Records which need to be retained for more than 10 years will need a paper satisfying Australia Archives specifications 1990/1 or 1990/2. Papers satisfying these specifications are obtainable from the Sydney office of Associated Pulp and Paper Mills (APPM) Ltd.

There is an assumption on the part of many concerned people that recycling paper and using recycled paper is automatically beneficial to the environment. The various reports of the Industries Commission into recycling have demonstrated the difficulties with this logic. There are many points at which the production and use of paper are linked to environmental issues and the impact of any strategy to deal with those issues needs to take account of that variety and complexity.

We have seen how the different concerns of the information manager and of the environmentalist can nevertheless be accommodated within an appropriately informed policy on paper use. The Australian information manager has available a range of tools and products to conduct an "environmental audit" of the workplace and in offering well founded advice to clients advice which is "fit for purpose", in that it addresses the environmental and the information needs of the client.

In advice, the information managers can ensure that they recommend paper fit for the purpose. In office practice, they can ensure that the three R's are pursued: Reduce, Re-use, Recycle. In product, they have at hand a spectrum of qualities extending from the least demanding to the most exacting.

Above all, they should have knowledge of the issues and how they relate to everyday information management. There is no reason why the Australian information manager cannot deal professionally and effectively with the impact of environmental concerns in Australia today.

#### By Stephen Ellis

National Director, Storage & Preservation, Australian Archives

References and other sources relevant to the Impact of Environmental Concerns on Information Managers:

APPITA "Pulp and Paper Statistics", Appita Journal, Vol.43, No.6, November 1990, p.468.

COMMONER Barry - The Closing Circle: Man Nature an Technology, New York 1971.

LANDES David S. - The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present, Cambridge, 1969; A.G. Jensen - "The evolution of Modern Television", SMPTE Journal, Vol.100, No.5 May 1991.

MARTYN John, VICKERS Peter, FEENEY Mary eds. - Information UK 2000, Bowker-Saur, London, 1990, p.114-115.

Department of Administrative Services - A Guide to the Use of Recycled Paper, Australian Government Publishing Service, Canberra 1990.

The Greenpeace Guide to Paper, Greenpeace Australia, Studio 14, 37 Nicholson Street, Balmain, NSW 2041.

Barbara Lord - The Green Workplace: A Practical Guide to an Environmentally Safe Workplace, 1990 (booklet & video) Information Australia, 45 Flinders Lane, Melbourne VIC 3000.

David Vincent - Office Paper - Recycle It, 1990 Waste Management Authority of NSW, PO Box 699 Chatswood NSW 2057.

Department of the Arts, Sport, the Environment, Tourism & Territories -

A National Waste Minimisation and Recycling Strategy Public Discussion Paper, Canberra June 1991.

Proposed Commonwealth Environment Protection Agency - Position Paper for Public Comment, Canberra July, 1991.

Industry Commission -

Pulp and Paper: Bleaching and the Environment, Report No.1, 21 May 1990, AGPS;

Interim Report on Paper Recycling, Report No.2, 21 May 1990, AGPS;

Recycling Volume I: Recycling in Australia, Report No.6 22 February 1991, AGPS;

Recycling Volume II: Recycling of Products, Report No.6 22 February 1991, AGPS.

Department of the Prime Minister & Cabinet -Ecologically Sustainable Development: A Commonwealth Discussion Paper. AGPS Canberra June 1990.

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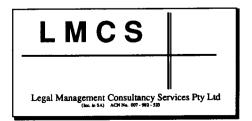
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