

PACIFIC MANUSCRIPTS BUREAU

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Report on PMB fieldwork in Port Moresby, 14-18 February 2011

PNG Lands Commissions: project development

In May 2007, at the invitation of the late Sam Kaima, who was a consultant on the records systems with the PNG-Australia Law and Justice Sector Program (LJSP), the PMB surveyed the archives of the Land Titles Commission and National Lands Commission in Port Moresby. The Bureau reported on the survey on 18 May 2007.

In July 2010, at the invitation of Roy Kriegler, Adviser Organisational Development and Change Management at the PNG Department of Justice and Attorney General (DJAG), the PMB visited the offices of the Lands Commissions

- to inspect progress in registering and storing their files,
- to discuss with the two Chief Commissioners an appropriate path for permanently storing their records and,
- in particular, to advise on the possibility of reformatting part or the whole of the records.

On 7 October Dr Lawrence Kalinoe, DJAG Secretary, Mr Benny Metio, DJAG Deputy Secretary – Corporate Affairs and General Administration, Dr Kriegler and other DJAG officials visited the PMB office at the Coombs Building. Kylie Moloney and I demonstrated the PMB's digital document copying system, developed for the Endangered Archives Tuvalu National Archives Major Project, which uses 'remote capture' software to operate an overhead camera, name and arrange image files.

On 28 October 2010 I submitted a report to the DJAG on preservation and reformatting of archives of the Lands Commissions (Attachment 1).

During November and December Dr Kriegler and the Bureau discussed possible database software and structures applicable to digitised images of the Land Titles Commission's extensive applications case file series.

On 19 January Dr Kriegler informed the Bureau that Sam Kaima had died on New Year's Eve. In the same email Dr Kriegler canvassed PMB participation in a workshop at the Lands Commissions. Having confirmed PMB participation and consulted with key DJAG staff, Dr Kriegler wrote again on 24 January recommending that the workshop proceed as soon as possible with the aims of:

- defining and establishing the file management system
- installing the scanning hardware and software
- initiating the scanning of documents, and
- training staff in the use of the filing and scanning equipment.

On 2 February Mr Metio approved a DJAG memo (Attachment 2) proposing the engagement of the PMB to assist the Department to establish its document preservation program in the Lands Commissions – the Bureau's expenses to be reimbursed.

SPONSORING INSTITUTIONS

<i>Australia</i>	National Library of Australia, Canberra The Library, Australian National University The Mitchell Library, State Library of NSW
<i>New Zealand:</i>	The Alexander Turnbull Library, Wellington Macmillan Brown Library, Canterbury University, Christchurch The University of Auckland Library
<i>United States:</i>	Library of the University of Hawaii, Honolulu Library of the University of California, San Diego Yale University Library, New Haven University of Michigan Library
	Pacific Regional Branch of the International Council on Archives (PARBICA)

In early February, I obtained a Canon 550D SLR camera with 18-55mm lens, a power adaptor, memory card, Velbon 'Sherpa' tripod (with reversible camera post) and other associated equipment. Note that the most recent Canon Powershot G-series cameras (G11 & G12) no longer have a 'remote capture' capacity – only the Canon SLR's have that capacity. Darren Boyd (CAP), Julia Millar (PARADISEC, CAP) and Warwick (Camera Exchange Melbourne) advised on the selection of the equipment.

Lands Commissions, Stores Road, Boroko, 14-18 March.

Mon 14 Feb. Dr Kriegler met me at Jackson's Airport. He had kindly offered to put me up at his flat overlooking Port Moresby harbour for the duration my visit. We spent the afternoon at the DJAG building in Waigani. We met with Mr Vagi Igo, the Project Co-ordinator, and Jerry Maiapu, a casual IT officer with DJAG who had developed a draft Access database for the LTC applications case file series. We planned for the workshop to be held the following day. We also discussed arrangements for transfer of digitised Lands Commissions documents to the DJAG IT section for backup and longterm preservation. Mr Maiapu announced that he had been offered a position with Exxon-Mobil and would be resigning from DJAG in the next day or two. In the evening Dr Kriegler and I tested the photographic equipment and familiarised ourselves with its operation.

Tues 15 Feb. The workshop at Four Mile ran all morning, attended by Mr Benedict Batata, Acting LTC Chief Commissioner, about 16 LTC and NLC staff, as well as DJAG IT staff, Mr Igo and Dr Kriegler. I demonstrated the 'remote capture' operation of the camera. Work flow and staffing for the operation of the camera were considered. Agi Ila gave an estimate of 4,655 files held in the LTC applications series. Most of the workshop was occupied with a presentation of the draft access database by Jerry Maiapu and Daniel Sakumai (the DJAG IT officer taking over from Jerry).

There was a thorough discussion of the content of the Access database for Land Titles Commission applications files: in particular, inclusion of details of the type of application and cross reference to the land description (District/Ward, Section and Lot number) allocated by the Lands Department. The existing card index to the LTC applications files is arranged by Province and customary land name. The Lands Department allocates a land description after the LTC makes its decision on the application, but the land description is not recorded on the index cards. It was agreed that the system would be improved by including the land description in the database. It would then be easier to trace a land inquiry back from the current land description to the original application. There was also a discussion over whether the digitised material should be linked to the database or embedded in it.

In the afternoon, under the guidance of Mrs Ila and Mr Igo, we set up a digitisation workspace in the Records Room. Dr Kriegler and I set up the camera in the Records Room, tested lighting and installed the camera operation software into a PC which the LTC had dedicated to the digitisation project. LTC Records Officers began learning how to organise files for copying, how to name and organise the digital files into folders, how to operate the camera and how to rotate images when necessary. Two files from the LTC application file series, East New Britain Province, were digitised.

Wed 16 Feb. The LTC Records Officers, Gabriella (LTC Deputy Registrar), Susan Mahi and Rova Gela, continued familiarization with the digitisation process, including setting up the photographic equipment, linking the camera to the computer, operation of the camera and preparation of the documents. They learnt how to prepare large format documents, *i.e.* survey maps and genealogies, and how to adjust the camera to successfully film them. A further 6 LTC files were digitised during the day. NLC staff, Veronica and Arua Leva, the Registrar, began learning how to prepare and film the documents.

During the afternoon DJAG IT Leader, John Haea, and Daniel Sakumai arrived to install a revised version of the Access database but could not upload it as they encountered a virus on the dedicated LTC PC.



Rova Gela, Susan Mahi and Agi Ila reformatting LTC applications case files, Feb 2011.



Vagi Igo, Agi Ila, Roy Kriegler (standing), Rova Gela and Susan Mahi (sitting), Land Commissions' Records Room, Feb 2011.

Thurs 17 Feb. Dr Kriegler nailed a timber border onto the copying table to help secure the tripod. A template was marked-up and fixed to copying table top to increase the speed of routine filming of standard documents.

Having gained confidence in the records reformatting process, the LTC Records Officers began working on their own without direction. The Records Officers learnt how to trace and re-name stray images. During the day the Records Officers digitised about 20 files.

NLC staff also continued to practice preparing documents for reformatting and operating the camera. It was agreed that the LTC, which has the bulk of the records, would work on reformatting for four days each week and that the NLC, using the same photographic equipment, but a separate computer, would work on reformatting their records for one day each week. It was also confirmed that digitised record series from the LTC and NLC would be arranged and stored as separate record groups, recognising the distinct functions of the two Lands Commissions.

There was a discussion about whether the reformatting tasks should be rotated among Lands Commissions' staff. It was agreed that the digitisation tasks would remain with the Records Officers in order to build their skills and maintain consistency of production.

Based on established rates of processing, 20 files a day, Dr Kriegler, Mr Vagi and I made estimates of the total amount of time required to complete reformatting of the various Lands Commissions records series.

Arrangements were made for secure over-night storage of the photographic equipment.

During the day I visited the DJAG building in Waigani with Dr Kriegler where we met Mr Metio, briefly reporting that the project was well underway. We met with Mr Haea in the DJAG IT section who confirmed that the virus would be deleted from the LTC computer, that the Access database would be installed, and that the computer would be entirely dedicated to the reformatting project. The DJAG Librarian, Wilma Marakan, reported that the Library had commenced a program for scanning key legal decisions to be up-loaded to the PACLII database.

Fri 18 Feb. Lands Commission Records Officers continued reformatting procedures displaying increased confidence and skill. Procedures for identification and digital reformatting of separate record series were reviewed.

Records Officers were trained in downloading backup digital files to an external hard drive. Arrangements were made for the regular transfer of the external drive to and from the DJAG IT section in Waigani where a digital archive would be maintained. It was clearly understood that on completion of digital reformatting, the closed Lands Commissions' file series would be transferred to the PNG National Archives for permanent retention.

DJAG IT staff cleaned up the virus on the LTC Records Room computer and installed a revised version of the Access database for the LTC applications case files.

Mr Benedict Batata, Dr Kriegler and Mr Vagi reviewed the work undertaken and indicated that they were satisfied with the operation of the equipment, the digital product and the capacity of the Lands Commissions' staff to undertake the tasks involved. However they did not lose sight of the scale of the reformatting project and the dedication and persistence which will be required of the Lands Commissions' staff in order to complete it.

I am very grateful to the late Sam Kaima, Mr Metio, Mr Batata, Mr Vagi and Dr Kriegler for the opportunity to be involved in establishing the Lands Commissions' records digitisation project and deeply appreciate the time spent working with the Lands Commissions' Registrars, Records Officers and other staff. I expect that the PMB will maintain contact with the Lands Commissions and, if necessary, provide further support throughout the life of the project.

PNG National Archives and Public Records Services, Waigani, 17 February.

Dr Kriegler and I met Puro Hanua, the Acting National Archivist, at the National Archives briefly on the Thursday morning. I was pleasantly surprised to meet Joe Naguwean there. Mr Naguwean is a former UPNG New Guinea Collection Librarian and Divine Word University Librarian. He has been working at the National Archives for the past four months.

We reported to Mrs Hanua on the Lands Commissions' records digitisation project and I handed over an Epson V700 photo scanner – a gift consequent on my ANU Outreach Award.



Mr Joe Naguwean, Ewan Maidment handing over photo scanner to Mrs Puro Hanua at the PNG National Archives reading room, February 2011.

Ewan Maidment
PMB Executive Officer
7 March 2011

Attachment 1.

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Report to PNG Department of Justice and Attorney General on preservation and reformatting of archives of the Land Titles Commission and National Lands Commission

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Introduction

On 18 May 2007, at the invitation of Mr Sam Kaima, a consultant on the records systems with the PNG-Australia Law and Justice Sector Program (LJSP), I surveyed National Lands Commission (NLC) and Land Titles Commission (LTC) records at their combined office building near Boroko. Mr Ken Richardson, LJSP Information Management and Technology Advisor, asked for a report on preservation and accessibility of the Lands Commissions' records. (See Appendix C.)

On 16 July 2010, at the invitation of Dr Roy Kriegler, Adviser Organisational Development and Change Management in the PNG Department of Justice and Attorney General, I inspected progress in registering and storing the Lands Commissions' records and took part in discussions about preservation of the records. (See Appendix A.) Dr Kriegler asked for a report on appropriate paths for permanently storing the Lands Commissions' records and for reformatting part or the whole of them.

On 7 October Mr Lawrence Kalinoe, Secretary of the Department of Justice and Attorney General, Mr Baure, Mr Metio, Dr Kriegler and other staff of the Department visited the Pacific Manuscripts Bureau at the Australian National University in Canberra where I gave a demonstration of the Bureau's digital photographic reformatting technique. Mr Kalinoe emphasized a need to commence work on digitising key record series of the Lands Commissions as soon as possible.

This report advises on:

1. Preservation of the original records
2. Phased reformatting program
3. Staffing, equipment and costings
4. Security

1. Preservation of the original records of the Lands Commissions

The preservation of land titles records is agreed by all parties to be of maximum legal and historical importance to PNG. Following his survey of archives on PNG in 1955, James Gibbney gave

preservation of (and replacement of lost) land titles records the highest rating.¹ In discussions in 2007 and on 16 July this year Commissioners Pitpit and Baure, and Mr Metio, recognised and insisted on the importance of preserving the Lands Commissions' archives.

In the discussion at the Lands Commissions' offices in July, Mrs Puro Hanua, the Acting National Archivist, made it clear that she also recognised the importance of preserving original LTC and NLC archives. Mrs Hanua reported that the National Archives is holding Native Lands Commission and LTC archives in good order and under strict security. She stated that: although there is a serious shortage of space in the Archives' repository, the National Archives would accommodate the Lands Commissions' archives; that the records would be held securely; that files could be retrieved from the Archives by the Lands Commissioners on request; and that files would only be made available to researchers with the permission of the Lands Commissioners.

However, as reported (see Appendix A), the Lands Commissions are reluctant to transfer their archives to the National Archives without first having digital copies of key series on hand for immediate reference purposes.

In order to exert maximum control over the Lands Commissions' records, a complete inventory of LTC and NLC record series should be compiled, preferably in close collaboration with staff of the PNG National Archives, including a retention/disposal schedule for each series, pending selective digitisation and transfer of archival series to the National Archives. (Cf. Appendix D.)

2. Phased digital reformatting program for the Lands Commissions' archives

The National Library of Australia has published on-line, *Digitisation of Heritage Materials* in PDF format at <nla.gov.au/preserve/dohm> which is a clear, useful and informative guide to digital reformatting.² There is also a power point presentation, "Introduction to Digital Imaging", accessible on the DOHM website.

The following proposed phased implementation is based on PMB field experience reformatting archival materials using digital and microfilm cameras. If possible, the selection of record series for digital reformatting and the reformatting itself should be undertaken in close consultation with the PNG National Archives.

Nov 2010 (a) Preliminary. Produce control lists to file level of series for reformatting:

- Identify initial series for reformatting, eg LTC Case Files and NLC Case Files.
- Continue transcription of LTC and NLC Case File Indexes to digital format.
- Determine precise numbers of files in selected series for reformatting.
- Estimate quantity and format of documents on file.
- Estimate time, labour and material resources required to complete reformatting.

Nov 2010 (b) Preliminary. Management, staffing, budget & equipment. See also point 3 below.

- Determine costs and funding source.
- Allocate responsibility for project control and supervision to permanent staff member/s.
- Obtain access to IT support staff.
- Acquire equipment.
- Select casual digitisation staff.

Dec 2010 (c) Pilot. Part of selected series, eg. earliest files in the LTC Case File series, used to test: image capture equipment; documentation, processing, arrangement and storage of images, and to train staff.

¹ 1956. H.J. Gibbney, 'The Archives of Australian New Guinea', *Library Association of Australia Conference 8*: pp.38-47.

² Andrew Stawowczyk Long, *Digitisation of Heritage Materials*, <nla.gov.au/preserve/dohm>, 2010; 170pp. Contact: email: anlong@nla.gov.au; phone: +61 2 62621382.

- Check digitised Case File Index is available for selected files.
- Allocate work space for two staff to feed documents and to operate the camera – check proximity to power source – obtain power lead and power board; obtain furniture, including bench or table for sorting and preparing files.
- Erect and connect digitisation equipment – copystand, lamps, camera, laptop.
- Determine image file naming convention.
- Make digital images in TIFF format of documents downloaded direct to laptop using “remote capture” device.
- Determine means for digital capture of large format documents on file, *eg.* maps, genealogical charts.
- Collate image files in folders matching each LTC Case File.
- Digital manipulation – cropping & rotating.
- Rename files, if necessary.
- Connect to metadata – LTC Case File Index.
- Produce derivatives *eg* combined sequential images in PDF format corresponding to each file in the LTC Case File series.
- Store Digital Masters.
- Review quantity and format of documents on file.
- Review time, labour and material resources required.

Jan-Jun 2011 (d) Proceed with digitisation of the remainder of LTC Case File series

- Quality assurance check.
- Review content management.
- Review backups.
- Upload for LTC in-house use.
- Review time, labour and material resources required.

Jul-Sep 2011 (e) Proceed with digitisation of NLC Case File series

- Quality assurance check.
- Review content management.
- Review backups.
- Upload for NLC in-house use.
- Review time, labour and material resources required.

Oct-Dec 2011 (f) Select further record series at the Lands Commissions for digitisation

- Quality assurance check.
- Review content management.
- Review backups.
- Upload for Lands Commissions in-house use.
- Review estimated time, labour and material resources required.

2012 (g) In consultation with the PNG National Archives consider digitisation of Native Lands Commission – LTC files held by the National Archives.

3. Staffing, equipment and costings

(a) Staff.

- Allocate responsibility for project control and supervision to permanent staff member/s.
- Obtain access to IT support staff.
- Select casual digitisation staff. It would be sensible to make the selection in consultation with the PNG National Archives.

(b) Hardware

Canon PowerShot G12	\$800
AC Adaptor	\$100
Battery	\$72
Battery charger	\$100
Mains power transformer & cable	\$60
USB Cables	\$30
Memory Card 4GB	\$40
Card Reader	\$25
[Or Canon 5D MkII & lens	\$4300 + accessories]
Manfrotto 190 Mini Salon Stand 806	\$1425
Manfrotto camera-clamp	\$10
Desk lamps x 2	\$100
Spirit level to adjust camera	\$10
QPCard 201	\$20
Laptop <i>eg</i> Toshiba Tecra A10	\$1300 (Preferred specifications: screen 15.6" or larger; processor 2.5 GHz, preferably Core 2; 8GB RAM; 500GB storage memory)
Terabyte portable harddrive	\$400
Surge breaker	\$6
Power board	\$10
Extension cord	\$10
Light meter	\$50
[PC for processing images Optional	\$2400]
<i>(c) Software</i>	
Adobe PhotoShop Elements 8	\$130
Adobe Acrobat 9 Pro	\$730
ReName	\$30
ACDSee Photo Manager	\$170
Opanda PowerExif	Freeware
<i>Totals</i>	\$5628 Canon PowerShot, without PC
	\$8028 Canon PowerShot with PC
	\$9128 Canon 5D MkII, without PC
	\$11528 Canon 5D MkII, with PC

4. Security

Digitisation will raise security issues. It may facilitate an illegal trade in copies of land documents. Steps will have to be taken to minimise the risk of the Lands Commissions losing control of the digitised material.

Ewan Maidment
PMB Executive Officer
28 October 2010



To: Mr Benny Metio, Deputy Secretary Corporate Affairs

(CC:) Dr Kalinoe, Messrs Batata, Kwago, Haea, & Igo

Date: 28 January 2011

Subject: Establishment of document scanning project for National Lands Commissions

PURPOSE

1. To seek your approval to engage the Pacific Manuscripts Bureau (PAMBU) to assist DJAG to establish its document-preservation program in the Land Titles & National Lands Commissions.

BACKGROUND

2. PAMBU primary function is to help with long-term preservation and accessibility of the documentary heritage of the Pacific Islands. The Bureau is sponsored by a number of libraries in Australia, New Zealand and the USA. Because of this, its consultancy costs are very affordable.
3. The program in the Lands Commissions commenced in July 2010 when Mr Ewan Maidment, Executive Officer, PAMBU, conducted a preliminary review of the current status of the files and documents.
4. This assignment was funded under the 2010 PALJP budget and further funding was approved for this program under PFD 415 of the 2011 PALJP budget.
5. His report was submitted in October 2010, which advised DJAG on the best technical approach for preserving all records and documents of the Commissions. It also provided a details of the staffing requirements and equipment that would be needed for this purpose.
6. Senior DJAG officers also visited the PAMBU offices in ANU in October 2010, at which time Mr Maidment demonstrated the most cost-effective way to scan large volumes of files and documents.
7. It was intended that the program would be co-ordinated by the LJSS consultant, Sam Kaima, but with his tragic passing-away, it was decided that the Department's Record Manager, Vagi Igo, would assume this responsibility.
8. Also, in the absence of Sam Kaima, DJAG will need increased technical support from PAMBU, funded under the PFD 415 budget. This option has been endorsed by the Lands Commissions, who are keen to commence the program in February 2011. Ewan Maidment from PAMBU, at our request, has agreed to run a 3-day workshop for the Lands Commission to get the project started. This work will implement the recommendations he made in his Oct 2010 Report.

ISSUES/COMMENTS

9. The Maidment report provided cost estimates of the equipment and software necessary to establish the scanning program. This cost, excluding laptop/PC, amounts to AU\$4,328 (approx. K11,400) – see attached cost schedule. This amount may vary depending on the availability of equipment and software.
10. Mr Maidment has agreed to visit DJAG for 3 days in the week beginning 14 February 2011. He will assist us to:
 - (i) Purchase the equipment & software in Australia and install these in the offices of the Lands Commissions,
 - (ii) Conduct a workshop with Lands Commission officers to develop a appropriate file-management and series-numbering systems,
 - (ii) Provide technical training to the Records Officers who will be responsible for the scanning work, and
 - (iv) Monitor the progress of the program.

11. Mr Maidment's consultancy costs will also need to be covered by the PFD 415 budget. This will include his travel and accommodation costs plus a consultancy fee of AU\$70 per hour (approx. K182/hour).
12. The 2011 PFD 415 has sufficient funds to meet these costs and any additional costs later in the year (see attached cost schedule).
13. Mr Maidment has advised that an Access data base needs to be developed (and maintained) for the purpose of indexing and locating scanned documents. With the resignation of the DJAG's systems analyst, Ian Cosmas, we will need to get the assistance of the young casual IT trainee, Jerry Maiapu, to work on this project. This will need your and Mr Haea's approval.
14. Mr Maidment has also requested that DJAG indemnifies PAMBU and its employees against any litigation costs in defending any legal action in connection with the provision of the services provided by PAMBU. This indemnity would not apply to any claim by a third party which results from any wilful misconduct or negligence by PAMBU or its employees. This wording is in line with standard wording used by other consultants which DJAG has contracted in the past.

OPTIONS/RECOMMENDATIONS

15. That you approve the above project plan and scheduling of this work, and
16. That you approve of the estimated costings to be charged to the 2011 PFD 415 budget.



Roy Kriegler
Adviser, Organisational Development

Attachments

- *Equipment costs*
- *PFD-415 Cost Schedule*