



Module Three of Ten

# Preparation for Microfilming

## TRAINING *in* PRESERVATION MICROFILMING



**Module Three of Ten**

# Preparation for Microfilming

Heather Brown

National Library of Australia  
2003



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# Introduction

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Welcome to Preparation for Microfilming.

The purpose of this module is to:

- I familiarise you with proper methods for handling original materials
- I introduce you to the preparation of materials for preservation microfilming—physical and bibliographic
- I familiarise you with maintaining stock records of materials.

## Prerequisites

This is the third module in the series of training materials on preservation microfilming.

Before you start on this module you need to have satisfactorily completed the introductory module, **Preservation Microfilming—Basics**. This module gives you the background information that you will need before you start on this module.

## Learning outcomes

When you have successfully completed this module, you will be able to:

- I demonstrate proper methods for handling original materials
- I physically prepare and arrange materials for microfilming
- I maintain records of microfilm stock
- I choose an appropriate format (film or fiche)
- I prepare originals for microfilming to meet standard bibliographic requirements
- I follow established procedures to ensure that copyright legislation is not breached during preservation microfilming projects.

In competency-based training models, the **learning outcomes** closely relate to the term **elements of competency**.

## Recognition of current competencies (RCC)

You may already have knowledge, experience and skills which are relevant to this module.

This means that if you wish to complete a formal Preservation Microfilming course, you may not have to study all of it.

Please discuss this with your course coordinator, or lecturer. Evidence of your microfilming competence, and/or an assessment, such as a practical test, will be required.

## Assessment

If you are formally studying the Preservation Microfilming course, you must meet certain **performance criteria** in order to demonstrate your competency in each unit or module.

These criteria form the basis of your assessment. They are listed at the beginning and end of each topic.

As you work your way through these training materials, you will need to keep a record of the **performance criteria** and other **learning activities** that you have completed.

## Conditions

- I You will also need access to a comprehensive range of materials that have to be collated and checked as they are prepared for microfilming.
- I Check with your lecturer /assessor and your mentor if there are any problems with access to these materials—either in your own workplace, or by arrangement with another organisation.
- I ✓ Some samples of copyright statements have been supplied with this module on one 35mm reel. They will be needed for **Activity 3.18**.

There are two types of learning activities in this module, which are indicated by the icons below:

## ■ Activity

Responses to these activities are written in this book. They are usually short tasks which keep you involved with the issues you are considering and may also require you to apply what you are learning.

Some of the activities in these training materials require you to perform certain tasks such as loading a camera, or operating a processor. A lecturer or assessor will observe you performing the tasks and then examine the results or the product (e.g. the newly processed microfilm) to check that it meets requirements. Major activities are marked with the symbol ★.

## ● Reflect

Here you will be asked to think about key issues, usually in consultation with workplace colleagues, and come to some conclusions. The purpose of these activities is to allow you to share your understanding with others, and benefit from wider experience than your own.

You will need to be prepared to discuss your findings or conclusions with your assessor or lecturer who will be signing off the relevant **performance criteria**.

## ▲ Submit

When this icon appears, you are ready to record in the **Log book** that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities** for a topic.

You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify that you can meet the **performance criteria** and that you have satisfactorily completed the **activities**.

If you work through the various activities along the way, you will find the assessment activities relatively easy to complete.

## Resources

 **There are a number of resources available on preservation microfilming.  
A librarian can help you find out where these resources are available.**

Below are a few:

### Printed materials

Adcock, Edward P. (ed. & comp.) 1998, *Principles for the Care and Handling of Library Material*, International Preservation Issues, number 1, IFLA-PAC, Paris.

Address: IFLA Core Programme for Preservation and Access (PAC) Bibliotheque Nationale de France, 2, rue Vivienne, 75084 Paris Cedex 02, France.

(Available online at IFLA website as *Principles for the care and handling of library material*, <<http://www.ifla.org/VII/4/news/pchlm.pdf>>, accessed 4 May 2003.)

Canadian Cooperative Preservation Project 1993, *Guidelines for Preservation Microfilming in Canadian Libraries*, Prepared by the National Library of Canada for the Canadian Cooperative Preservation Project, Ottawa.

Elkington, Nancy E. (ed.) 1992, *RLG Preservation Microfilming Handbook*, Research Libraries Group, Mountain View, California.

Elkington, Nancy E. (ed.) 1994, *RLG Archives Microfilming Manual*, Research Libraries Group, Mountain View, California.

Fox, Lisa L. (ed.) 1996, *Preservation Microfilming: A Guide for Librarians and Archivists*, 2nd edn, ALA, Chicago.

Genealogical Society of Utah 2001, *Camera Operator's Manual*, 2nd edition update, Genealogical Society of Utah, Intellectual Reserve Inc., Salt Lake City.

Harvey, Ross 1993, *Preservation in Australian and New Zealand Libraries: Principles, Strategies and Practice for Librarians*, 2nd edn, Charles Sturt University, Wagga Wagga.

Heritage Collections Council Secretariat, Department of Communications, Information Technology and the Arts 1998, *ReCollections: Caring for Collections Across Australia*, Heritage Collections Council Secretariat, Department of Communications, Information Technology and the Arts Canberra. (The resource *ReCollections* is also available online from the Museums Australia website, <<http://amol.org.au/reollections/>>, accessed 15 May 2003.)

IFLA Round Table on Newspapers/IFLA Section on Serial Publications 1996, *Guidelines for Newspaper Preservation Microfilming*. Compiled and edited under the auspices of the IFLA Round Table on Newspapers and IFLA Section on Serial Publications, IFLA Headquarters, The Hague. (IFLA Professional Reports, no. 49)

Meyer, Lars & Gertz, Janet 1993, *RLG Guidelines for microfilming to support digitization*, Research Libraries Group, Mountain View, California. Available online at <<http://www.rlg.org/preserv/microsuppl.pdf>>, accessed 12 May 2003.

*Microform and Imaging Review* 1972–, (journal), quarterly, K. G. Saur, Munich, Germany.

*Micrographics Year Book* 1981– 2001 (annual), G. G. Baker, Windlesham, Surrey, UK. (Last edition 2001).

National Library of Australia 1995, *Preservation Microfilming: Does It Have a Future?* Proceedings of the First National Conference of the National Preservation Office, at the State Library of South Australia, 4–6 May, 1994, National Library, Canberra.

National Library of Australia 1998, *Guidelines for Preservation Microfilming in Australia and New Zealand*, National Library, Canberra.

National Preservation Office 2000, *Guide to Preservation Microfilming*, The Office, London.

Saffady, William 1990, *Micrographic Systems*, 3rd edn, Association for Information and Image Management, Silver Spring, MD.

Saffady, William 2000, *Micrographics: Technology for the 21st Century*, Association of Records Managers and Administrators, Prairie Village, Kansas.

SEACAP (Southeast Asian Consortium for Access and Preservation) 2000, Proceedings of the International Meeting on Microform Preservation and Conservation Practices in Southeast Asia: Assessing Current Needs and Evaluating Past Projects, February 21–24, 2000, Chiang Mai University, Chiang Mai. (Available from the SEACAP website, <<http://www.seacap.chiangmai.ac.th>>, accessed 4 May 2003.)

### Standards (relevant):

ANSI/AIIM MS23 – 1998 Standard for Information and Image Management – Standard recommended practice for production, inspection and quality assurance of first-generation silver microfilm of documents.

MP 25 – 2002 Basic Guide to microfilming – Miscellaneous Standard. Standards Australia.

See also the list of international standards in the **Learning Guide**.

## Internet sites

(As internet sites change frequently, you may need to use a search engine to identify the latest location)

AICCM (Australian Institute for the Conservation of Cultural Material Inc.), <<http://www.aiccm.org.au>>, accessed 15 May 2003. Address: GPO Box 1638, Canberra ACT 2601, Australia.

AIIM (Association for Information and Image Management), <<http://www.aiim.org>>, accessed 4 May 2003, and its sub group the Film-based Imaging Association, <<http://www.fbi.aiim.wegov2.com>>, accessed 14 May 2003. The film-based imaging association has a buyers guide of U.S. manufacturers and distributors of micrographic equipment and supplies. Address: 1100 Wayne Avenue, Suite 1100, Silver Spring MD 20910 USA

ANSI (American National Standards Institute) <<http://www.ansi.org>> accessed 15 May 2003. ANSI administers and coordinates the U.S. standardisation system. Address: Customer Service, American National Standards Institute, 25 West 43rd Street, New York, NY 10036.

Artlab Australia, <<http://www.artlab.sa.gov.au/>>, accessed 3 May 2003. (Artlab provides a range of conservation and preservation information and services.) Address: Artlab Australia, 70 Kintore Avenue, Adelaide South Australia 5000, Australia.

BSI Group (British Standards Institution), <<http://www.bsi-global.com>>, accessed 13 May 2003. The source of information and supply of British microfilming standards. BSI Group 389 Chiswick High Road, London, W4 4AL, UK.

CLIR (Council on Library and Information Resources), <<http://www.clir.org/>>, accessed 3 May 2003. Address: 1755 Massachusetts Avenue, NW, Suite 500 Washington DC 20036, USA

COOL (Conservation Online), <<http://palimpsest.stanford.edu/>>, accessed 14 May 2003. Hosted by Stanford University, USA, this is a comprehensive source for online information for preservation in libraries and archives.

ECPA (European Commission on Preservation and Access), <<http://www.knaw.nl/ecpa/expo.htm>>, accessed 3 May 2003. Hosts GRIP – which is a Gateway for Resources and Information on Preservation.

Address: Royal Netherlands Academy of Arts and Sciences, Kloveniersburgwal 29, P.O. Box 19121 NL-1000 GC Amsterdam, The Netherlands.

G.G. Baker and Associates, <<http://www.ggbaker.com/>>, accessed 15 May 2003.

This organisation provides detailed advice about micrographic systems. The web site includes links to suppliers and also provides background information about areas of microfilming from jacketing to linking with electronic document management systems.

Address: Saffron Hill, Chedworth, Glos. GL54 4AL UK.

IFLA (International Federation of Library Associations and Institutions) Preservation and Conservation (PAC) Core Programme, <<http://www.ifla.org/VI/4/admin/general.htm#1>>, accessed 15 May 2003.

IFLA-PAC Bibliotheque Nationale de France, Address: 2, rue Vivienne, 75084 Paris Cedex 02, France.

- See also *Principles for the care and handling of library material*, <<http://www.ifla.org/VI/4/news/pchlm.pdf>>, accessed 15 May 2003.
- A number of back issues of *International Preservation News* are available direct from the IFLA website, <<http://www.ifla.org/VI/4/pac.htm#4>>, accessed 15 May 2003.
- The IFLA-PAC Centre at the National Library of Australia maintains a *Documentary Heritage Preservation Register*. This provides information about preservation projects in the Southeast Asian and Pacific regions such as microfilming, training, basic conservation and collection surveys, <<http://www.nla.gov.au/dhpr/>> accessed 15 May 2003.

IPI (Image Permanence Institute)

<<http://www.rit.edu/~661www1/>>, accessed 15 May 2003. The IPI is a university-based research laboratory devoted to image preservation.

Address: Rochester Institute of Technology, 70 Lomb Memorial Drive Rochester NY 14623-5064, USA.

ISO (International Organisation for Standardisation), <<http://www.iso.ch/>>, accessed 15 May 2003.

Address: ISO Central Secretariat PO Box 56 CH-1211 GENÈVE Switzerland.

Library Preservation and Conservation Tutorial – Southeast Asia. Designed for librarians and conservators in Southeast Asia, it has a range of information on preservation, including microfilming, <<http://www.librarypreservation.org/>>, accessed 15 May 2003.

The Microfilm Shop, <<http://www.microfilm.com/>>, accessed 15 May 2003.

Provides product information, news and views with a focus on business applications.

MICROLINK-L is an email discussion list on preservation microfilming jointly owned by the National Library of Australia and the State Library of South Australia, <[http://www.nla.gov.au/nla/listserv/microlink\\_l.html](http://www.nla.gov.au/nla/listserv/microlink_l.html)>, accessed 15 May 2003.

Museums Australia, <<http://amol.org.au/>>, accessed 15 May 2003.

Address: PO Box K36 Haymarket NSW 1238.

(The resource *ReCollections* is also available online from the Museums Australia website, <<http://amol.org.au/reollections/>>, accessed 15 May 2003.)

National Library of Australia <<http://www.nla.gov.au/>>, accessed 15 May 2003.

Address: Canberra, ACT 2600, Australia

National Library of Australia. *Policy on Preservation Copying of Collection Materials*, <<http://www.nla.gov.au/policy/micro.html>>, accessed 15 May 2003.

National Library of Australia. Anica – Australian Network for Information on Cellulose Acetate,

<<http://www.nla.gov.au/anica/index.html>>, accessed 15 May 2003.

See also MICROLINK-L

<[http://www.nla.gov.au/nla/listserv/microlink\\_l.html](http://www.nla.gov.au/nla/listserv/microlink_l.html)>, accessed 15 May 2003, and IFLA-PAC *Documentary Heritage Preservation Register* <<http://www.nla.gov.au/dhpr/>> accessed 15 May 2003.

The National Preservation Office (UK).

Address: British Library, 96 Euston Road London, NW1 2DB, UK

<<http://www.bl.uk/services/preservation/>>, accessed 15 May 2003.

NSSN: a National Resource for Global

Standards, <<http://www.nssn.org>>, accessed 15 May 2003.

Provides a fee-based information service which includes international standards and technical data. Address: Customer Service, American National Standards Institute, 25 West 43rd Street, New York, NY 10036.

PAMBU (Pacific Manuscripts Bureau),

<<http://rspas.anu.edu.au/pambu/>>, accessed 15 May 2003. Based

in the Research School of Pacific and Asian Studies, Australian National University, the aim of the Pacific Manuscripts Bureau is to locate and preserve archives, manuscripts and other unpublished or semi-published material through microfilm.

Address: PAMBU, Research School of Pacific and Asian Studies, Australian National University, Canberra, ACT, 0200, Australia.

Preservation Resources is a division of OCLC. (Online Computer Library Center Inc.),

<<http://www.oclc.org/oclc/presres/microfilm.htm>>, accessed 15 May 2003.

It offers services such as preservation microfilming to libraries, including duplicating, scanning and polysulfide treatment.

*RLG DigiNews* is a newsletter conceived by the members of the Research Libraries Group's PRESERV community. Funded in part by the Council on Library and Information Resources (CLIR) from 1998–2000, it is available internationally via the RLG PRESERV web site, <<http://www.rlg.org/preserv/>>, accessed 15 May 2003. Address: Research Libraries Group 1200 Villa Street Mountain View, CA 94041-1100 USA.

SEACAP (Southeast Asian Consortium for Access and Preservation), <<http://www.seacap.chiangmai.ac.th>>, accessed 14 May 2003.

The aim of SEACAP is to encourage and support collaboration amongst libraries, archives and other institutions and interested individuals in order to preserve and provide access to the published and documentary heritage of the region.

Spring Singapore, <<http://www.psb.gov.sg>>, accessed 15 May 2003.

The source for information and supply of Singapore Codes of Practice relating to microfilming.

PSB Building, 2 Bukit Merah Central, Singapore 159835.

Standards Australia, <<http://www.standards.com.au>>, accessed 14 May 2003. Address: GPO Box 5420 Sydney NSW 2001, Australia.

UNESCO *Memory of the World Programme*,

<<http://whc.unesco.org/nwhc/pages/home/pages/homepage.htm>>, accessed 15 May 2003.

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# Topic 1

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## Proper handling methods for original materials

### Performance criteria

You will have achieved the performance criteria for this topic when you can:

- I list some typical formats of materials which are prepared for preservation microfilming
- I list techniques for handling various formats of original materials to avoid damaging them.

### Formats of materials

Preservation microfilming across the world potentially involves a wide range of formats of original materials. The exercise below provides an opportunity to reflect on these formats and any handling problems that they may present.

#### ■ Activity 3.1

### Formats of materials

- a) List examples of types of formats of materials that have been prepared for preservation microfilming by your own organisation and by others.
- b) What kind of handling problems have they presented?
- c) Discuss these with your colleagues and complete the table below.

The first section on maps has been completed as an example

Formats of materials prepared for preservation microfilming	Handling problems
maps	<ul style="list-style-type: none"><li>• large sized—awkward to handle</li><li>• can be fragile</li><li>• can be rolled up, need flattening</li><li>• need large flat surface to support maps</li></ul>

### Handling original materials

Original materials are most vulnerable to damage when they are being handled or moved. Even moving items over a short distance can present a problem.

Try carrying a single sheet of paper from one room in your organisation to another. If you hold it at the corner there is a strong likelihood of the sheet creasing. The likelihood of further damage increases if you are rushing, or if someone walks in front of you, or pushes a trolley in your way.

### Culturally-sensitive materials

There is a wide range of special requirements that need to be taken into account when handling culturally-sensitive materials. Check back to Topic 2 of the introductory module, **Preservation Microfilming—Basics** for a discussion of these issues and how they will affect the handling of culturally-sensitive materials.

### Guidelines and techniques for handling materials

The following points have been drawn from:

- I *ReCollections: caring for collections across Australia—handling, transportation, storage and display*, section on Handling (Heritage Collections Council Secretariat 1998, pp.3-5)
- I advice on handling archival materials during copying provided by Vicki Humphrey, Artlab Australia.



Get help to lift a heavy item and use a trolley

© Photograph courtesy of National Library of Australia

## ✓ Do

Feature	Always
1. use care	
2. support individual items	<ul style="list-style-type: none"> <li>• use both hands when carrying the item or properly support it on a trolley</li> </ul>
3. keep you hands clean	<ul style="list-style-type: none"> <li>• have clean hands at all times when handling original materials</li> </ul>
4. wear gloves	<ul style="list-style-type: none"> <li>• wear clean cotton or close-fitting surgical gloves to protect originals against the oils, acids and salts in your skin</li> </ul>
5. lift items safely	<ul style="list-style-type: none"> <li>• make sure you have enough people to lift the item safely—wait until help is available</li> </ul>
6. plan ahead	<ul style="list-style-type: none"> <li>• reduce unnecessary movements by working out where you are going to put an item before you pick it up</li> <li>• plan your route to avoid obstructions and uneven surfaces</li> </ul>
7. have equipment ready	<ul style="list-style-type: none"> <li>• make sure you have all the equipment you need to move the item properly e.g. trolleys</li> </ul>
8. use padding	<ul style="list-style-type: none"> <li>• use padding, cushioning or separation 'battens' capable of absorbing and reducing shock, between pieces when you have more than one object in a single box</li> </ul>

## ✗ Don't

Feature	Never
1. carry too much	<ul style="list-style-type: none"> <li>• carry too many items at once—you will not be able to support each item properly, you may drop items, or you may injure yourself</li> </ul>
2. overload trolleys	<ul style="list-style-type: none"> <li>• stack or overload trolleys</li> </ul>
3. rush	<ul style="list-style-type: none"> <li>• rush, even when working to a deadline, as accidents are more likely to happen when people are hurrying</li> <li>• push trolleys over uneven surfaces and avoid abrupt jerks and stops</li> </ul>
4. mixed heavy and light items together	<ul style="list-style-type: none"> <li>• place light-weight and heavy objects in the same container or carrying box, which could fall over and severely damage the lighter ones</li> </ul>

## Recording damage to items

You need to record any damage that occurs during the moving and handling of original materials for microfilming. When reporting damage, describe it briefly, noting the nature, location and severity of the damage and the date of your report. Severe damage should be photographed.

A sample report form is provided below.

Most fine arts insurance policies will not cover loss or damage caused by unskilled handling. Remember that you cannot replace a unique item, even if your insurance claim is successful.

**Report on damaged object**

---

Item: \_\_\_\_\_

Title: \_\_\_\_\_ Accession No: \_\_\_\_\_

Artist/Manufacturer: \_\_\_\_\_

Brief Description of Damage: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Location of Damage: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How did the damage occur? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Does the damage require urgent attention?      Yes       No

If yes, remember that you will need to seek permission from the owner before proceeding with any treatment.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please return a copy of this form with the object.

*Example of damage report form*

© Reprinted by permission from ReCollections: caring for collections across Australia – handling, transportation, storage and display, *Heritage Collections Council*.

## Techniques for handling special formats

The following are some additional techniques for handling special formats of materials. They have been drawn from information provided by Vicki Humphrey from Artlab Australia.

Handling techniques	Material types
	P = paper, manuscripts, documents L = large items F = folded items R = rolled items B = bound volumes Ph = photographs
<ul style="list-style-type: none"> <li>• <b>handle as little as possible</b>—items are easily damaged by creasing and tearing</li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>handle all fragile items with extreme care</b></li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>have clean hands</b></li> <li>• wear cotton or close-fitting surgical gloves to protect originals against the oils, acids and salts in your skin</li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>provide support</b> e.g. place item on a board to move it</li> </ul>	P, Ph, L
<ul style="list-style-type: none"> <li>• <b>carry items horizontally</b> on a rigid support with covering material to protect from the wind, sun and rain</li> <li>• place paper between two pieces of acid free board to protect it</li> </ul>	P, Ph, L
<ul style="list-style-type: none"> <li>• <b>separate manuscripts</b>, paper items or photographs by a sheet of good quality acid-free paper</li> </ul>	P, Ph
<ul style="list-style-type: none"> <li>• <b>never allow newspaper or wrapping paper to come into contact with originals</b>, as the inks may run into the original item</li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>never attempt any repairs</b> without prior approval of the owner/parent organisation</li> <li>• consult a qualified conservator for advice</li> <li>• never mend tears with adhesive tape (this damages the original)</li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>use pencils only</b></li> <li>• do not use ink near paper originals</li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>avoid paper clips</b>, notes, pins and clips, as they can damage fragile paper</li> </ul>	P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>remove fastenings</b> only with the approval of the owner/organisation</li> <li>• remove fastenings carefully</li> <li>• in extreme cases, there may be a requirement to put fastenings back in place without further damage to the originals e.g. pins replaced in the same pin holes</li> </ul>	P, L, F, R, B, Ph  P, L, F, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>bound material</b> should not be disbound for filming without prior approval of the owner/organisation</li> </ul>	P, L, B, Ph

Handling techniques	Material types
	P = paper, manuscripts, documents L = large items F = folded items R = rolled items B = bound volumes Ph = photographs
<ul style="list-style-type: none"> <li>• <b>do not use rubber bands</b></li> <li>• use cotton tape, or traditional covers such as cotton cloths and silk or cotton ties</li> </ul>	P, L, R, B, Ph
<ul style="list-style-type: none"> <li>• <b>get two people to carry large works</b></li> <li>• plan the route, clear obstacles and make sure that a third person can help open doors.</li> </ul>	P, B
<ul style="list-style-type: none"> <li>• <b>folded items</b> should be handled extremely carefully, especially if they are torn or split along the folds</li> <li>• carefully examine the folds before unfolding to ensure that they are opened out in the correct order</li> <li>• if large folded items are to be refolded, care should be taken to fold them in the correct order, to avoid placing new stresses on already weakened paper</li> </ul>	P, F
<ul style="list-style-type: none"> <li>• <b>unroll items gradually and safely</b> by placing weights on the outer corners, then unrolling the items gradually, and weighting them as they are unrolled</li> <li>• paper will take up moisture from the air and gradually relax flat</li> <li>• any weights used should be clean and archivally sound</li> <li>• <b>never</b> roll items against the curve to flatten them (this may flatten the document faster but it causes creasing)</li> <li>• roll items on to a tube to support them rather than placing them <b>inside</b> the tube (this avoids creasing)</li> </ul>	R 
<ul style="list-style-type: none"> <li>• <b>to remove a book or bound journal</b> from the shelf:               <ul style="list-style-type: none"> <li>– push the books on either side of it further into the shelf</li> <li>– hold it firmly with your hand around the spine, with your fingers on one cover and your thumb on the other</li> </ul> </li> <li>• do not pull it by the top of the spine, as this creates damage</li> </ul>	B
<ul style="list-style-type: none"> <li>• <b>open the volume gently</b></li> <li>• if it does not open flat, support it, so that the structure is not strained</li> <li>• turn pages slowly and with care</li> <li>• do not lick your fingers to turn the pages</li> </ul>	B  B
<ul style="list-style-type: none"> <li>• <b>remember occupational health and safety issues</b></li> <li>• do not try to carry lots of volumes at once</li> <li>• large bound volumes should be carried by two or more staff</li> <li>• use trolleys to move them</li> <li>• do not stack valuable or delicate books, or carry them so that they will rub against each other</li> </ul>	B



*Removing a book correctly*



*Support the book,  
turn the pages slowly*



### Summary

- I A wide variety of original materials are microfilmed across the world—including maps, plans, palm leaf manuscripts, letters and diaries.
- I All original materials must be handled with care. This includes having clean hands, wearing gloves, providing support, and checking with owners before removing or repairing any parts.

### Checklist

In order to test your understanding of this material, work through the checklist below.

If you can answer 'yes' to each question, and you have completed the activities for this topic, you are now ready for your lecturer or assessor to verify that you:

- I can meet the performance criteria
- I have satisfactorily completed the activities.

If you are in any doubt about any of the content, you should read through the material again, consult some of the references mentioned in the section entitled Resources, talk to your work colleagues or contact your lecturer or mentor.

I can:

- I list some typical formats of materials which are prepared for preservation microfilming
- I list techniques for handling various formats of original materials to avoid damaging them.

### ▲ Submit

You are now ready to record in your **Log book** that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities** for this topic.

You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify this information.

---

# Topic 2

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## Preparation of materials for microfilming

### Performance criteria

You will have achieved the performance criteria for this topic when you can:

- I notify users that material has been removed from the shelves for microfilming and may not be available
- I assess whether materials are complete (bibliographic integrity)
- I assess physical condition of materials
- I follow best practice principles to:
  - stabilise and repair materials
  - achieve a cost-effective filming result acceptable to the client.

### Preparation

Preparation of materials for microfilming is most important, because it provides the foundation for all the future tasks. It includes all the activities carried out prior to microfilming after the initial selection of materials has been made:

- I retrieving items from the shelves
- I physical preparation
- I bibliographic preparation—checking for correct order, missing pages etc.
- I technical preparation—choosing a format, planning what goes on each reel etc.

Preparation assists the future user by determining a logical order and sequence. Once filmed, the contents of a collection cannot be rearranged, and the reader is limited to the strict linear sequence.

Preparation also reduces the time spent by the camera operator in tasks such as unfolding items, flattening pages, determining the proper sequence for shots and removing fasteners.

### Retrieval

Items should be carefully retrieved for filming by putting into practice all of the special handling techniques discussed in Topic 1.

Potential users, both staff and collection users, should be notified that the original material is unavailable by methods such as the following:

- I a conspicuous **flag** (or marker) on the shelf, of a prominent message such as **Removed for microfilming**
- I notes in catalogue records and in search aids for archival material
- I updating notes in local location files
- I announcements to staff (especially reference and retrieval staff in libraries and archives).



*Placing a flag on the shelf to let staff know that an item is being microfilmed*

© Photograph courtesy of State Library of South Australia

The notification can include relevant information such as:

- l the number, title, volume number, date and series
- l date removed
- l name of contact person and contact details for enquiries.

## Using flags

Flags should be inserted wherever irregularities occur or to provide instructions to the camera operators. Flags also indicate to the camera operator where to place standard targets.

Typical problems to flag include:

- l damaged pages
- l missing pages or issues
- l irregular pagination
- l illegible pages
- l variant editions
- l 'double-page-spreads' or 'wrap-around' pages in newspapers
- l mutilations
- l faulty binding.



### Assessing whether an item is complete

This step, known as **bibliographic integrity**, involves:

- I making sure that all the pages are there
- I making sure that all pages are in the correct order
- I detailed **collating** for missing pages and issues
- I noting any problems e.g. where pages are damaged or the text is obscured.

This step gives information for the next stage of preparing the targets—which include, for example, details of any irregularities.

Details are included on a collation sheet, shown below.



*Collating a newspaper*

© Photograph courtesy of National Library of Australia

Ideally, original items to be filmed should be as complete as possible—including 'dust jackets' of books and bound-in advertisements.

### Creating the 'best copies' for filming

If missing pages or issues are found, where possible the staff member will need to make arrangements for replacement pages or alternative copies of whole items. Library staff can assist with this process. Examples of creating 'best copies' frequently occur when microfilming back runs of newspapers, where copies may be supplied by several organisations. The targets will reflect these arrangements. This option is unlikely to apply to unique manuscripts.



## Ensuring completeness of materials

The following table is a summary of typical steps taken to make sure the original material is as complete as possible. The steps have been further broken down into specific tasks. They also include examples of some typical approaches to problems.

Steps	Specific tasks	Examples of typical approaches
collation/ checking details	<ul style="list-style-type: none"> <li>• check library catalogue records and databases for details such as dates, pagination and descriptions of items</li> <li>• ask library staff to help</li> </ul>	<ul style="list-style-type: none"> <li>• note errors on collation sheet</li> <li>• prepare targets with details of errors to be included in the sequence</li> <li>• check for completeness of books, pamphlets etc. from database or catalogue description e.g. dates, number of pages, inclusion of fold-outs</li> </ul>
liaise with publishers	<ul style="list-style-type: none"> <li>• check for different editions</li> </ul>	<ul style="list-style-type: none"> <li>• newspapers may have several editions on the same date e.g. 'metropolitan', 'last'</li> <li>• check organisation's policy on:               <ul style="list-style-type: none"> <li>– which edition(s) are to be filmed</li> <li>– whether one full edition is to be filmed with the differing pages from other editions added—the publisher can often supply details of page variations.</li> </ul> </li> </ul>
collation: supplements	<ul style="list-style-type: none"> <li>• check for supplements</li> </ul>	<ul style="list-style-type: none"> <li>• if supplement is missing, arrange replacement</li> <li>• if supplement is paginated in sequence with the issue, leave in same order</li> <li>• if it has own pagination, place at end of issue</li> </ul>
collation: issues not published	<ul style="list-style-type: none"> <li>• check for issues not published</li> </ul>	<ul style="list-style-type: none"> <li>• verify by checking for notes in previous or next issues</li> <li>• check calendar for dates as a clue e.g. public holidays, religious festivals</li> <li>• create a 'not published' target and place at the spot where the issue is missing</li> <li>• also note 'not published' details on <i>irregularities target</i></li> </ul>
arrange for replacement	<ul style="list-style-type: none"> <li>• check for missing issues</li> </ul>	<ul style="list-style-type: none"> <li>• if issue or pages are missing or damaged, arrange for replacement copy or photocopy e.g. with help of library staff (replacements are not possible for unique archival materials)</li> </ul>
ask library staff to help	<ul style="list-style-type: none"> <li>• check for damaged/illegible/missing pages</li> </ul>	<ul style="list-style-type: none"> <li>• prepare <b>quality targets</b> to highlight that original is damaged</li> </ul>
collation: 'double page spreads'	<ul style="list-style-type: none"> <li>• check for 'double-page-spreads' or 'wrap-around' pages</li> </ul>	<ul style="list-style-type: none"> <li>• flag these for camera operator</li> <li>• these can be filmed both in sequence and repeated separately as a full 'double page'</li> </ul>

● Reflect 3A

### Typical approaches to problems

Discuss the typical approaches to problems above with your colleagues.

Does your organisation prepare items differently? Why?

Are there any steps from the list that you could adapt to your own needs?

■ Activity 3.4

### Assessing whether items are complete ('bibliographic integrity')

From the information provided on the collation sheet below, how complete is the copy of *Asian Courier* newspaper for 1953?

Your assessment should summarise the dates and details of the problems in each case.

**a) missing pages and mutilations**

Date	Details of problem

**b) incorrect pagination and dates**

Date	Details of problem

**c) missing whole issues (issues intended to be published)**

Date	Details of problem

**d) issues not published (e.g. following holidays)**

Date	Details of problem

**e) title changes**

Date	Details of problem

**f) supplements**

Date	Details of problem

## Newspaper Microfilming Collation Sheet

**title:** *Asian Courier*

**total no. pages:**

**period covered:** *Jan–Dec 1953*

**collated by:**

**frequency:** *weekly*

**date:**

month	date	no. pages	comments	month	date	no. pages	comments
Jan	6		not published	July	7	12	
	13	8	incorrectly dated as 1952		14	12	sale supplement 6p
	20	8			21	12	
	27	8			28	12	
Feb	3	10	pp3–4 incorrectly numbered as pp13–14	Aug	4	12	incorrectly dated as 4 July
	10	10			11	8	pp4,5 double page spread
	17	8	missing pages pp 3–4		18	12	
	24	10			25	12	pp6-12 incorrectly numbered as pp4–10
Mar	3	10		Sep	1	10	Now called 'Asian Weekly Courier'
	10	–	missing		8	10	holiday supplement 6p
	17	10			15	10	
	24	8	pp2,7 double page spread		22	12	pp6,7 double page spread
	31	10	election supplement 8p		29	10	
Apr	7	12		Oct	6	12	mutilation: pages torn out pp5–6
	14	10			13	12	
	21	12			20	-	missing
	28	10	mutilation: text missing pp1–2		27	12	
May	5	10		Nov	3	10	Now called 'Asian Weekly News'
	12	10			10	12	mutilation: section of p10 cut out
	19	10	mutilation: photo torn out p8		17	10	
	26	10			24	10	
June	2	10		Dec	1	10	missing pages 7–8
	9	10	missing		8	12	
	16	10			15	12	
	23	–	not published		22	12	holiday supplement 6p
	30	12			29	–	not published

**Problems present:**

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> title change        | <input type="checkbox"/> missing pages | <input type="checkbox"/> mutilations                 | <input type="checkbox"/> incorrect pagination/dates |
| <input type="checkbox"/> double page spreads | <input type="checkbox"/> supplements   | <input type="checkbox"/> need for multiple exposures | <input type="checkbox"/> other (comment)            |

### Assessing the physical condition

The physical condition of the original material must be assessed prior to filming so that:

- l the originals can be stabilised, if needed
- l special handling instructions can be prepared
- l any damage that occurs while material is being filmed can be detected. (This can be critical when dealing with an external microfilming organisation).



*Staff member assessing physical condition*

Assessment of the physical condition will include checking for features such as:

- l binding—condition, tightness
- l attachments such as fasteners, clips, pins
- l colour of paper e.g. yellowing, grey
- l folds or creases in the pages
- l the presence of any other material e.g. inserts, fold outs
- l fragility or brittleness likely to cause damage when the item is handled
- l stains or dirt
- l mould (also potentially an occupational health and safety issue)
- l damage by insects or rodents (alert to the need for treatment)
- l minor tears or 'nicks'
- l major tears or holes

- l previous attempts at repairs e.g. adhesive or 'sticky' tape
- l loose pages
- l faint text
- l 'bleed-through' of ink.

All of these will provide challenges to the camera operator.

## Condition reports

Some organisations complete formal condition reports on items, particularly for items that are rare, fragile or valuable. These can provide a record to avoid misunderstandings and disputes over any damage.

An example of a condition report is included below.

Sample condition report form

**A. Condition on despatch**

Call No. ....

--	--	--	--

Page No. ....

--	--	--	--

Page No. ....

Dirty surface	Yes/No	Comments .....
Staining	<input checked="" type="checkbox"/>	.....
Body crossed	.....	.....
Minor tears on edges	x	.....
Major tears on edges	.....	.....
Missing corners & holes	<input type="checkbox"/>	.....

**B. Condition on return**

Call No. ....

--	--	--	--

Page No. ....

--	--	--	--

Page No. ....

Dirty surface	Yes/No	Comments .....
Staining	<input checked="" type="checkbox"/>	.....
Body crossed	.....	.....
Minor tears on edges	x	.....
Major tears on edges	.....	.....
Missing corners & holes	<input type="checkbox"/>	.....

Example of condition report

## ■ Activity 3.5

### Assessing physical condition



For this activity you will need access to a comprehensive range of materials that have to be collated and checked as they are prepared for microfilming.

- a) Check through this collection. With the permission of the curators, select **two** old items that have visible physical problems e.g. damaged, torn, fragile, creased, loose pages.
  - Ideally, one of these items should be published (for example an issue of an old journal or a newspaper).
  - The other item should be unpublished e.g. a manuscript, scrapbook, diary .
- b) Practise all of the handling techniques.
- c) Assess the physical condition of each item by completing the details in the forms below.

**Sample condition report form**

**A. Condition on despatch**

Title No. ....

--	--	--	--

Page Nos. ....

--	--	--	--

Page Nos. ....

Dirty surface	Yes/No	Comments .....
Staining	<input checked="" type="checkbox"/>	.....
Badly creased	.....	.....
Minor tears on edges	x	.....
Major tears on edges	.....	.....
Missing corners & holes	<input type="checkbox"/>	.....

Sample condition report form

**A. Condition on despatch**

Title No. ....

--	--	--	--

Page Nos. ....

--	--	--	--

Page Nos. ....

<p>Dirty surface</p> <p>Staining</p> <p>Badly creased</p> <p>Minor tears on edges</p> <p>Major tears on edges</p> <p>Missing corners &amp; holes</p>	<p>Yes/No</p> <p><input type="checkbox"/></p> <p>-----</p> <p>x</p> <p>—</p> <p>○</p>	<p>Comments .....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
--	---	---

## Stabilising

Stabilising involves undertaking **minor repair work** or **debinding** to produce the best possible copy for microfilming.

Check back to the earlier section on **Guidelines and techniques for handling materials** in Topic 1.

### Best practice principles

The following best practice principles are worth restating:

Get approval from the owner/organisation first before:

- I removing fastenings
- I mending tears, doing repairs or debinding.

### Minor repairs

If approval is given by the owner/organisation, trained staff can make minor repairs.



*National Library of Australia staff doing minor repairs*

Examples of minor repairs are:

- ▮ separating pages that are stuck together
- ▮ repairing tears that would make filming difficult e.g. using 'archival' tape (repairing tears would only be done on lower value items)
- ▮ removing dirt, discoloured tape and other defects which cover up the text
- ▮ replacing faint or damaged pages/sections with a photocopy
- ▮ ironing newspapers at low temperature to flatten creases (not recommended when originals are to be kept after filming)
- ▮ flattening pages by lightly spraying with distilled water to humidify them, then stacking them between sheets of blotting paper in a large press for 24 hours. **This procedure is not recommended for manuscripts. Always test items first to see if the ink will run.**
- ▮ flattening rolled sheets using the techniques in Topic 1, **Techniques for handling special formats.**

## Debinding



### *Debinding*

Tight bindings cause information loss due to the original being out of focus with shadows and reflections. It therefore may be necessary to debind or 'disbind' documents.

Always consult a conservator and the original owner/organisation when deciding whether to debind. The decision will include an assessment of the tightness of the binding and the flexibility of the paper. If the inner margin is too tight, a gutter shadow may appear in the film, even with a camera that has a **book cradle**. If text falls in this gutter it will be obscured and out of focus. This will also affect future scanning of the film.

The *RLG Archives Microfilming Manual* suggests the following:

*A volume can generally be filmed intact if at least 1/4 inch [0.5 cm] of the inner margin remains parallel to the surface of the page when the volume is opened at various places.*

(Elkington 1994, p.29)

In some cases, loosening or cutting the sewing threads will relax the item sufficiently to enable them to be filmed. Other options include debinding by a trained conservator, and guillotining or slicing the spine.

In all cases these options mean that the item is unsuitable for further use after filming until it is re sewn or rehoused.

Debinding is definitely **not** an option to be considered with items that are rare, or where the binding has an aesthetic, historical, exhibition or monetary value.

## The result

The end result of preparation is summarised in this diagram:



In the end a balance needs to be struck between these three objectives that may pull in different directions.

The *Guidelines for Preservation Microfilming in Australia and New Zealand* describes the problem clearly:

*It is easy to do too much conservation repair work, adding unnecessary cost to the project-or too little, allowing unacceptable damage to occur. Likewise one can do too much cleaning, again adding to costs, or too little cleaning, leading to a poor reproduction.*

(National Library of Australia 1998, pp.31–32)





**a) Observation**

Observe a colleague stabilising an item by doing a range of minor repairs such as mending and replacing pages, cleaning pages or flattening. Ask your colleague about the purpose of each task and how it will help the final microfilm product.

**b) Training and practising**

Ask the colleague to **train** you in performing the range of these tasks.

Now **practise** until you are ready to be assessed.

**c) Performing two minor repair tasks—assessment**

With the permission of the owner, and in the presence of your assessor/lecturer, now perform **TWO minor repair tasks** competently.

Each step needs to be performed correctly and signed off on the Activity 3.7 table below before you are competent.

**Description of condition of original item**

Description of minor repair task	Lecturer/assessor to verify that each task has been performed correctly		
	Correct ✓ yes or ✗ no	Assessor signature	Date
1.	<input type="checkbox"/>		
2.	<input type="checkbox"/>		

### Summary

- I Preparation is the most important stage of microfilming—it provides the foundation for all other work.
- I Preparation includes:
  - retrieving items from the shelves
  - physical preparation
  - bibliographic preparation
  - technical preparation
- I When items are retrieved for microfilming, users should be notified that materials are unavailable e.g. by flags, announcements.
- I Assessing bibliographic integrity involves checking for completeness of a work and whether the pages are in correct order. The physical condition needs to be assessed so that originals can be stabilised.
- I Stabilising involves minor repair work and debinding to provide the best copy for microfilming.
- I The end result of preparation is to get:
  - the best achievable filming result, at
  - an acceptable risk of damage to the original, in
  - the most cost-effective way.

### Checklist

In order to test your understanding of this material, work through the checklist below.

If you can answer ‘yes’ to each question, and you have completed the activities for this topic, you are now ready for your lecturer or assessor to verify that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities**.

If you are in any doubt about any of the content, you should read through the material again, consult some of the references mentioned in the section entitled **Resources**, talk to your work colleagues or contact your lecturer or mentor.

I can:

- I notify users that material has been removed from the shelves for microfilming and may not be available.
- I assess whether materials are complete (bibliographic integrity)
- I assess physical condition of materials
- I follow best practice principles to:
  - stabilise and repair materials
  - achieve a cost-effective filming result acceptable to the client.

### ▲ Submit

You are now ready to record in your **Log book** that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities** for this topic.

You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify this information.

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# Topic 3

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## Handle stock and chemicals safely

### Performance criteria

You will have achieved the performance criteria for this topic when you can:

- I check and maintain stock levels
- I safely receive, handle, prepare and store potentially hazardous materials and maintain necessary **Material Safety Data Sheets**.

### Check and maintain stock levels

The **raw materials** or **consumables** of preservation microfilming are the films and chemicals used in their processing. Most have specific use-by dates.

**Stock records** assist in maintaining an adequate level of films and chemicals required for ongoing projects within the recommended guidelines for use-by dates.

It is really a question of balance. *Too little* stock can result in expensive and frustrating delays while waiting for new supplies; *too much* can lead to materials being stockpiled beyond their optimum period.

Stock records also provide a system that helps account for when and by whom the films and chemicals are used.

It is common practice for stock records to list a critical minimum level of stock. Once stock reaches this critical level, it is time to re-order.

Stock records can be maintained on computer, or by a simple manual system such as the one in Activity 3.8 below

## ■ Activity 3.8

### Stock records

Below is an example of a snapshot in time from a stock record for 35mm microfilm rolls.

In this case let us imagine that the supply time can be very fast—a maximum of 3 days from ordering to receipt.

Check the stock record below to answer the following:

a) What is this organisation's *critical minimum point* of stock for 35mm roll film?

---

b) In the table below *calculate the units remaining* and the *number of reels* issued by filling in the spaces above the dotted lines ...

c) What is the *highest total* number of films used for *any one day* during the period?

---

d) Following the recommended procedures in this organisation, *on what date* would you have re-ordered new 35mm film stock?

e) At what level would set your *critical minimum point* if the supply time was 10 working days?

Stock record number		Type/catalogue	Critical minimum point = 20	Re-order date and details
123 Brand A 35mm microfilm				
Date	No. issued	Staff member	Units remaining carried forward	
16/01/01	2	Umesh	33	
16/01/01	1	Mary	.....	
17/01/01	2	Nguyen	30	
17/01/01	.....	Ayesha	27	
17/01/01	2	Mila	25	
18/01/01	1	Umesh	...	
19/01/01	2	Nguyen	22	
22/01/01	.....	Mary	20	
22/01/01	3	Ayesha	17	
23/01/01	2	Mila	.....	
24/01/01	1	Umesh	14	
			+ 200	200 new
			214	
24/01/01	.....	Nguyen	211	

## Occupational health and safety

Occupational health and safety issues affect all areas of microfilming. It is important that all staff are aware of their responsibilities to others and themselves.

You should become familiar with all the occupational health and safety issues that affect you under local and national laws. For example, you should be aware of the correct ways of protecting yourself from hazards in the workplace. You should also be aware of the legal aspects of occupational health and safety as they relate to your state and country, which are contained in:

- I acts
- I regulations

- I codes of practice (e.g. labelling of hazardous substances)
- I standards—specifications for relevant tools such as fire extinguishers etc.

### Potentially hazardous materials

Some microfilming organisations may use a small number of chemicals that may be regarded as 'potentially hazardous' according to national or international regulations. The most likely potentially hazardous chemical is **ammonia** that is used in processing of diazo microforms, while some of the chemicals used in the cleaning of processing equipment also need to be handled with care.

The following comments are intended as an overview of general issues involved in handling chemicals. They apply to all types of chemicals used in the workplace and at home and have been adapted from *ReCollections: caring for collections across Australia—managing people, health and safety* pp53–60:

- I make sure that you understand how to read the labels
- I do not use a chemical unless you have checked the health and safety data relating to it
- I be aware of national and local acts and regulations
- I ensure that all staff are trained in the safe handling, preparation, storage and disposal of chemicals, including emergency procedures.

In addition, the more detailed advice provided in the relevant **Material Safety Data Sheets (MSDS)** should be followed, together with the relevant national and international acts, regulations and codes of practice. These are explained in the section, **Safe storage of chemicals**.

### Safe handling of chemicals

Most of the people working with microfilm chemicals will never have experienced any problems. However, it is important to be aware of the principles of safe handling and to be alert to certain chemicals, such as ammonia, that need to be handled with extra care.

Safe handling of chemicals applies to all stages, from the moment of receiving the chemicals until their final disposal.

#### Protecting your sight

Eyesight can be damaged by chemical splashes. Safety glasses should be worn in cases where chemicals (such as ammonia) are likely to be used, which can damage the eyes.

An emergency **eye-wash** should be easily accessible.



*Emergency eye wash*

### **Protecting your lungs**

Respiratory masks should be worn when handling ammonia (e.g. when duplicating diazo). A wide variety of masks is available. Before choosing a mask, seek appropriate technical advice from a qualified bureau or government agency.

### **Protecting your skin**

Again, it is worthwhile highlighting that most of the people working with microfilm chemicals will never have experienced any problems. However, it is important to be aware that different types of chemicals can affect the body in a variety of ways, for example:

- l they may locally irritate the skin
- l at low exposure levels, they may produce no problems, but their effect may be cumulative (increasing with additional exposures)
- l once a person is sensitive to one chemical they become more likely to have allergic reactions to others
- l one person may have no reaction to a chemical, while another person may have a severe reaction to the same chemical.

A variety of **gloves** and **aprons** are available for protecting the skin and body. Chemical suppliers will be able to give advice on the best types of protection.

An **emergency shower** should also be available.



*Handling chemicals with gloves*

### **Protecting your feet**

Ideally footwear should be solid, closed at the toe and covering the whole foot.

In some countries it is not the custom to wear footwear, especially inside. In these cases careful thought should be given to ways of protecting the feet from chemical splashes and other accidents.

### **Manual handling**

Some chemicals are supplied in heavy containers.

To avoid hurting yourself, do not attempt to lift or move heavy items alone. Use trolleys to help move items.

Microfilming staff should be trained in correct manual handling procedures.

### **Specialised equipment**

If potentially hazardous chemicals, such as ammonia, are used, a **fume cupboard** may be required to confine and extract hazardous fumes.

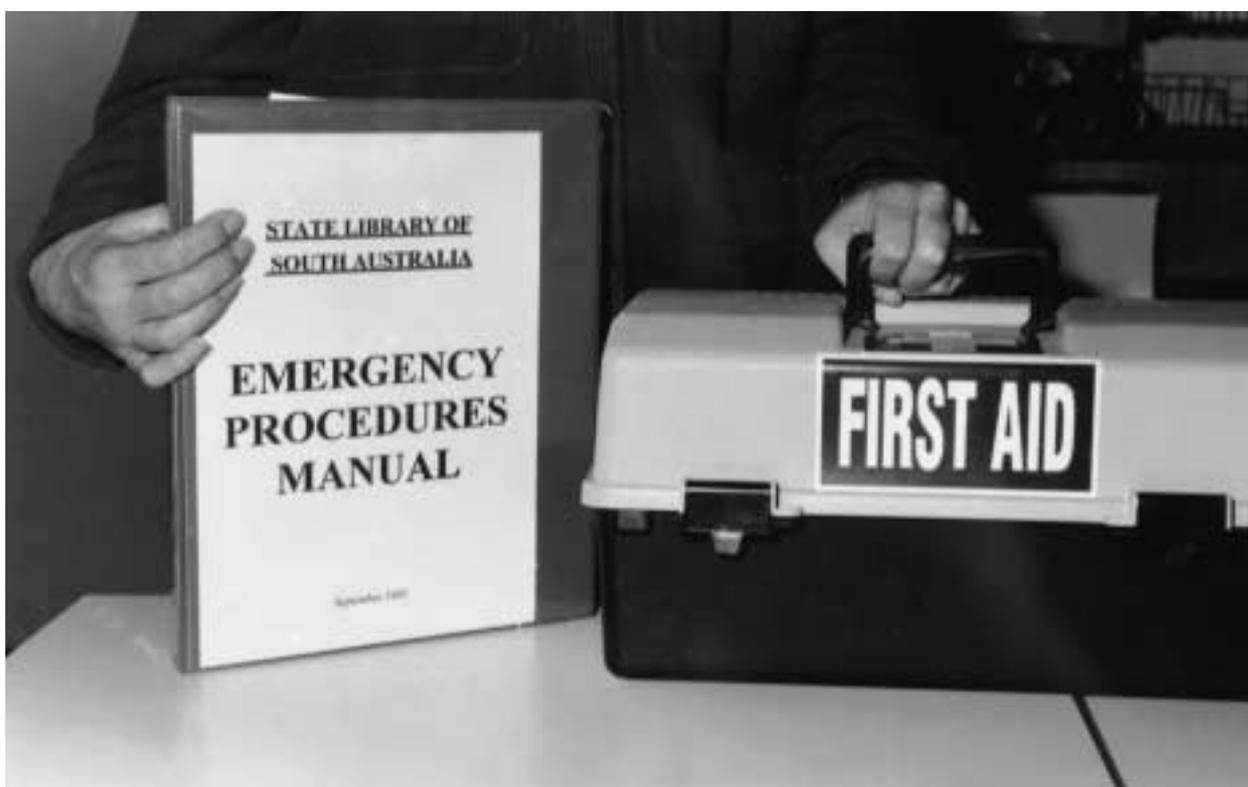
### Emergency procedures

All organisations should have a clear set of emergency procedures known to all staff and volunteers. These procedures should be clearly displayed.

A well-equipped **first aid kit** should always be on hand, together with a clearly displayed list of addresses and telephone numbers of the nearest doctor and hospital.

Even in small organisations, it is a good idea for one or more staff members to have first aid training. Many organisations have first aid officers.

Further information is provided in the module **Preservation of Materials** under the topic **Disaster Management**.



*Emergency procedures and first aid kit*

### Disposal of chemicals—protecting the environment

Each country will have its own strict regulations relating to the disposal of chemicals, especially chemicals from the processors and cleaning substances used during equipment maintenance. Ultimately these regulations protect the whole environment in which we live. Check first with your government authorities for specific information about disposal requirements.

### Preparing laboratory materials

Before using chemicals such as cleaners check the information in the **Materials Safety Data Sheets** (see below) and make sure all the relevant protective equipment is available.

- ❑ Never empty chemicals into containers that can be mistaken for food and drink containers.
- ❑ Never have food near chemicals.
- ❑ If you have been using chemicals, always wash your hands before eating.

## Safe Storage of Chemicals

### Material Safety Data Sheets

Chemicals and solvents should always be stored according to relevant government acts and regulations, and the specifications listed in the **Material Safety Data Sheets**.

These sheets provide detailed and specific information about substances such as:

- ▮ identification of the chemicals e.g. products and relevant government codes or labels, such as the hazardous chemical code and poisons schedule number
- ▮ physical description and properties e.g. form, colour, odour, ignition temperature, flammability
- ▮ health hazard information e.g. whether the substance is hazardous or contains poisons
- ▮ stability and chemical reactions with other substances
- ▮ first aid information
- ▮ precautions for use e.g. whether gloves and eye protection are required
- ▮ safe handling and storage information e.g. storage temperature, ventilation requirements
- ▮ disposal and spillage
- ▮ prevention of fire and explosion.

Material Safety Data Sheets are available from the manufacturers. Many can be obtained direct from relevant websites such as that of Kodak. They should be filed and made available for all microfilming staff to read.

The Material Safety Data Sheets will specify special storage requirements. These include:

- ▮ temperature e.g. store in a cool place under a certain temperature
- ▮ ventilation requirements.

*Excerpt from a Material Safety Data Sheet*

© Reproduced by permission from Kodak

<p>KODAK PROSTAR Plus Fixer</p> <p style="text-align: center;">MATERIAL SAFETY DATA SHEET</p> <p>000003871/F/AUS Approval Date: 2002-01-18 Print Date: 01.06.2002</p> <p>----- Supersedes MSDS No. 200000640 dated 08.11.1995</p> <p>----- 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</p> <p>Product Name: KODAK PROSTAR Plus Fixer</p> <p>Catalog Number(s): 401 3405 - 3 x 5 litres Ready-To-Use 403 6992 - 3 x 5 litres Ready-To-Use</p> <p>Manufacturer/Supplier: KODAK AUSTRALASIA Pty. Ltd., 173 Elizabeth Street, Coburg, Victoria 3058, AUSTRALIA</p> <p>For Chemical Emergency Information, in Australia call 1800 033111 (24 hour service Australia-wide); in New Zealand call 0800 734 607 (24 hour service)</p> <p>For Other Information, call 61 3 9353 2222</p>	<p>Synonym(s): PCD 5737</p> <p>Product Use: Professional black and white photographic processing solution</p> <p>----- 2. COMPOSITION/INFORMATION ON INGREDIENTS</p> <p>Weight % - Component - (CAS Registry No.)</p> <p>80-85 Water (007732-18-5) 15-20 Ammonium thiosulphate (007783-18-8) 1-5 Sodium sulphite (007757-83-7) &lt; 1 Pentetic acid, pentasodium salt (000140-01-2) &lt; 1 Potassium iodide (007681-11-0)</p> <p>----- 3. HAZARDS IDENTIFICATION</p> <p>STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to criteria of Worksafe Australia</p> <p>Contains no scheduled poisons</p> <p>-----</p>	<p>4. FIRST-AID MEASURES</p> <p>Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.</p> <p>Eyes: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur. Skin: Wash with soap and water. Get medical attention if symptoms occur.</p> <p>Ingestion: Drink 1-2 glasses of water. Seek medical attention. Never give anything by mouth to an unconscious person.</p> <p>First Aid Facilities: Not specified</p> <p>Note to Physicians: Not specified</p> <p>----- 5. FIRE FIGHTING MEASURES</p> <p>Hazchem Code: Not specified</p> <p>Extinguishing Media: Use appropriate agent for adjacent fire.</p> <p>Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.</p>
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<p>Special Exposure Hazards: None (see also Stability and Reactivity section).</p>	<p>----- 10. STABILITY AND REACTIVITY</p>	<p>14. TRANSPORT INFORMATION</p>														
<p>Unusual Fire and Explosion Hazards:</p>	<p>Stability: Stable</p>	<p>United Nations UN Number: None, not regulated</p>														
<p>----- 6. ACCIDENTAL RELEASE MEASURES</p> <p>Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.</p>	<p>Incompatibility: Strong oxidizing agents. Contact with strong acids may liberate sulphur dioxide. Contact with strong bases may liberate ammonia. Contact with sodium hypochlorite (bleach) may liberate hazardous materials.</p> <p>Hazardous Decomposition Products: Oxides of nitrogen, oxides of sulphur</p> <p>Hazardous Polymerization: Will not occur.</p>	<p>----- 15. REGULATORY INFORMATION</p> <p>Poisons Schedule: Not specified</p> <p>Carcinogenicity Classification (components present at 0.1% or more): - International Agency for Research on Cancer (IARC): None - American Conference of Governmental Industrial Hygienists (ACGIH): None - National Toxicology Program (NTP): None - Occupational Safety and Health Administration (OSHA): None - Worksafe Australia: None</p>														
<p>----- 7. HANDLING AND STORAGE</p> <p>Personal Precautionary Measures: Avoid breathing mist or vapour. Avoid contact with eyes and prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling.</p> <p>Prevention of Fire and Explosion: Keep from contact with oxidizing materials, highly oxygenated or halogenated solvents, organic compounds containing reducible functional groups.</p> <p>Storage: Keep container tightly closed to prevent the loss of water. Keep away from incompatible substances (see Incompatibility section).</p>	<p>----- 11. TOXICOLOGICAL INFORMATION</p> <p>Effects of Exposure:</p> <p>Inhalation: Expected to be a low hazard for recommended handling. Some asthmatics or hypersensitive individuals may experience difficult breathing.</p> <p>Eyes: No specific hazard known. May cause transient irritation.</p> <p>Skin: Low hazard for recommended handling.</p> <p>Ingestion: Expected to be a low ingestion hazard. May cause irritation of the gastrointestinal tract.</p> <p>Chronic Effects: Not specified</p>	<p>----- 16. OTHER INFORMATION</p> <p>The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture. The actual label information will depend upon the intended use of the product. Worksafe Australia labeling appears for commercial/industrial use.</p> <p>Worksafe Australia Labeling:</p> <p>Not classified as hazardous according to criteria of Worksafe Australia</p> <p>National Health and Medical Research Council Standard for the Uniform Scheduling of Drugs and Poisons Labeling:</p> <p>CONTAINS NO SCHEDULED POISONS</p> <p>SAFETY DIRECTIONS: Avoid contact with skin or eyes.</p> <p>FIRST AID: No first aid instructions are recommended for labelling purposes.</p>														
<p>----- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION</p> <p>Exposure Standards: Not established</p> <p>Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.</p> <p>Respiratory Protection: None should be needed. A respirator should be worn if hazardous decomposition products are likely to be or have been released.</p> <p>Respirator type: Full-face positive-pressure air-supplied. See Stability and Reactivity Section. If respirators are used, a program should be instituted to assure compliance with WORKSAFE AUSTRALIA standard AS/NZS 1716 : 1994.</p> <p>Eye Protection: Wear safety glasses with side shields (or goggles).</p> <p>Skin Protection: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.</p> <p>Recommended Decontamination Facilities: Eye bath, washing facilities, safety shower</p>	<p>----- 12. ECOLOGICAL INFORMATION</p> <p>The following properties are ESTIMATED from the components of the preparations.</p> <p>Potential Toxicity</p> <table border="0"> <tr> <td>Fish LC50 mg/l:</td> <td>&gt;100</td> </tr> <tr> <td>Daphnid EC50 mg/l:</td> <td>&gt;100</td> </tr> <tr> <td>Algal IC50 mg/l:</td> <td>Not available</td> </tr> </table> <table border="0"> <tr> <td>Organics Readily Degradable (&gt;70%):</td> <td>No</td> </tr> <tr> <td>Potential Bioaccumulation:</td> <td>Log Pow &lt;1</td> </tr> </table> <table border="0"> <tr> <td>COD (approximate g/l):</td> <td>52</td> </tr> <tr> <td>BOD5 (approximate g/l):</td> <td>43</td> </tr> </table> <p>Potential Toxicity Waste treatment microorganisms EC50 (mg/l): &gt;100</p>	Fish LC50 mg/l:	>100	Daphnid EC50 mg/l:	>100	Algal IC50 mg/l:	Not available	Organics Readily Degradable (>70%):	No	Potential Bioaccumulation:	Log Pow <1	COD (approximate g/l):	52	BOD5 (approximate g/l):	43	<p>----- CONTAINS NO SCHEDULED POISONS</p> <p>SAFETY DIRECTIONS: Avoid contact with skin or eyes.</p> <p>FIRST AID: No first aid instructions are recommended for labelling purposes.</p> <p>----- The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.</p> <p>----- Eastman Kodak Hazard Ratings: R-1, S-1, F-1, C-0</p>
Fish LC50 mg/l:	>100															
Daphnid EC50 mg/l:	>100															
Algal IC50 mg/l:	Not available															
Organics Readily Degradable (>70%):	No															
Potential Bioaccumulation:	Log Pow <1															
COD (approximate g/l):	52															
BOD5 (approximate g/l):	43															
<p>----- 9. PHYSICAL AND CHEMICAL PROPERTIES</p> <p>Physical Form: Liquid Color: Yellow Odor: Ammonia Specific Gravity (water = 1): 1.30 Vapour Pressure at 20°C (68°F): 24 mbar (18 mm Hg) Vapour Density (Air = 1): 0.6 Volatile Fraction by Weight: 80-85 % Boiling Point: &gt;100°C (&gt;212°F) Solubility in Water: Complete pH: 7.2 Flash Point: None Flammability Limits: Not specified</p>	<p>----- 13. DISPOSAL CONSIDERATIONS</p> <p>Discharge, treatment, or disposal may be subject to Commonwealth, States or local laws. Contract with a licensed chemical disposal agency. Since emptied containers retain product residue, follow label warnings even after container is emptied.</p>	<p>----- Copyright © Eastman Kodak Company, 1994-2002 and Privacy Practices (updated 14-Sep-2001).</p>														



### ■ Activity 3.10

Setting up a file of chemicals and Material Safety Data Sheets

- a) Prepare a summary list of all of the chemicals that are used by your own organisation (or another microfilming organisation) for preservation microfilming.
- b) Obtain copies of the relevant Material Safety Data Sheets for the chemicals. (Check with your mentor or lecturer/assessor if you have any problems in finding the Material Safety Data Sheets.)
- c) Place the summary list and Material Safety Data Sheets in a file for access by staff using the chemicals.
- d) Show the completed file to your lecturer/assessor.

Your lecturer or assessor will need to sign off that you have satisfactorily completed these tasks in your Log book.

### Summary

- I Stock records assist in maintaining an adequate level of films, chemicals and other materials needed for ongoing projects within the recommended guidelines for use-by dates.
- I It is common for stock records to list a critical minimum level of stock. Once stock reaches this level it is time to re-order.
- I Occupational health and safety issues affect all areas of microfilming. Most of the people working with microfilm chemicals will never have experienced any problems. However, chemicals must be handled and stored safely according to government regulations and the specifications in the **Material Safety Data Sheets**.

### Checklist

In order to test your understanding of this material, work through the checklist below.

If you can answer 'yes' to each question, and you have completed the activities for this topic, you are now ready for your lecturer or assessor to verify that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities**.

If you are in any doubt about any of the content, you should read through the material again, consult some of the references mentioned in the section entitled **Resources**, talk to your work colleagues or contact your lecturer or mentor.

I can:

- I check and maintain stock levels
- I safely receive, handle, prepare and store potentially hazardous materials, and maintain necessary **Material Safety Data Sheets**.

### ▲ Submit

You are now ready to record in your **Log book** that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the activities for this topic.
- I You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify this information.

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# Topic 4

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## Choose an appropriate format

### Performance criteria

You will have achieved the performance criteria for this topic when you can:

- I match the microfilm format to the specification
- I match the microfilm format to the intended use and to the user's preference
- I consider cost implications when deciding on a format.

### Microfilm formats

Revise the sections on **Microfilm formats**, **Choice of format** and **Reduction ratio** in the module, **Preservation Microfilming—Basics**.

Common formats for films include roll film (16mm and 35mm), cartridge (16mm), aperture cards and microfiche (with and without jackets).

A number of factors will influence film size including:

- I consistency—follow previous formats used for filming the same or similar works
- I size and volume of originals
- I size and quality of image required.

### Specifications or *Agreements* for filming

These were also discussed in the module **Preservation Microfilming—Basics**.

Activity 3.11 gives you the opportunity to apply the theory by matching the format to the specifications provided.

## ■ Activity 3.11

### Matching format to specification

Answer the following questions using the information below from a detailed Agreement.

#### Details from specification

- I Original materials for filming: 10 years' worth of a weekly newspaper, double pages, A3 size, (297mm x 420mm).
  - I Reduction ratio specified at 1:16.
  - I Filming orientation specified as: comic mode 1B.
- a) Would you use:
- I roll OR fiche format
  - I 16mm OR 35mm film to match the details in the specification? Give reasons for your choice.



## Match format to use and user's preference

Lisa Fox comments that microfiche provides easier access to brief information such as indexes, reference books, pamphlets and monographs that will be heavily used. Roll film, on the other hand, is best suited as a format for serials, manuscripts, multi-volume works, and low-use items. (Fox 1996, p.179)

**Activity 3.12** gives you the opportunity to match the format to the intended use and user-preference.

## Cost implications when deciding on a format

Cost is another factor to consider in the choice of format.

Again, Lisa Fox provides the following guidelines on the costs of various formats (Fox 1996, pp.176–178).

Cheapest formats	Comments
roll film	cheapest in terms of both equipment and labour
16mm roll film	cheaper than 35mm film when the production of duplicate service copies is taken into account

Typically, where microfilm is created for more general purposes, (e.g. short term storage) the requirements will not be as rigorous and the overall costs will be lower.

This was discussed in the module **Preservation Microfilming—Basics** under **General microfilming and preservation microfilming**.

### ■ Activity 3.12

## Matching format to use, preference and costs

In the 5 examples below, match the format to:

- I intended use
- I user preference
- I costs.

Give reasons for your choice.

a) **Intended use:** to copy large engineering drawings

Microfilm format selected:

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Reasons:

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- b) **User preference:** for a format to update criminal records usually written on A4 sized sheets of paper (210mm x 297mm).

Microfilm format selected:

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Reasons:

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- c) **Costs:** select the cheapest format to film four manuscripts, smaller than A4 size (210mm x 297mm), about 200 pages each. Use the guidelines given by Lisa Fox above. A large number of duplicate copies are planned.

Microfilm format selected:

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Reasons:

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- d) **Intended use:** to copy three 19th century letter books written on 7cm thick A3 sized volumes (297mm x 420mm).

Microfilm format selected:

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Reasons:

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- e) **Intended use:** to copy 20 years' worth of electoral rolls containing names of registered voters in alphabetical order. The electoral rolls are in thin bound volumes, slightly smaller than A4 size (210mm x 297mm).

User preference is for a format that can be quickly and easily scanned by the eye in searching for specific voter's names. The same name may be checked, year by year, over the whole 20 year period.

Microfilm format selected:

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Reasons:

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## Summary

- I In matching microform format to intended use and user preference it is useful to remember that:
  - fiche provides easier access to brief information e.g. indexes, reference books, pamphlets
  - roll film is better suited to low-use items with 'long runs' e.g. serials, newspapers.
- I When looking at costs, roll film is the cheapest format, and 16mm roll film is cheaper than 35mm roll film.

## Checklist

In order to test your understanding of this material, work through the checklist below.

If you can answer 'yes' to each question, and you have completed the activities for this topic, you are now ready for your lecturer or assessor to verify that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities**.

If you are in any doubt about any of the content, you should read through the material again, consult some of the references mentioned in the section entitled Resources, talk to your work colleagues or contact your lecturer or mentor.

**I can:**

- I match the microfilm format to the specification
- I match the microfilm format to the intended use and to the user's preference
- I consider cost implications when deciding on a format.

## ▲ Submit

You are now ready to record in your **Log book** that you:

- I can meet the performance criteria
- I have satisfactorily completed the activities for this topic.

You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify this information.

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# Topic 5

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## Prepare originals to meet standard bibliographic requirements

### Performance criteria

You will have achieved the performance criteria for this topic when you can:

- I compile materials to be filmed in the correct order
- I program images
- I compile correct targets for a microfilm project.

### Compile materials in the correct order

Taking the time to ensure a correct and logical sequence of items for filming will result in a final product that will be more useful to users now and in the future.

#### Published materials

The *Guidelines for Preservation Microfilming in Australia and New Zealand* state that all parts of the item should be filmed in the order in which they were published. (National Library of Australia 1998, p. 30)

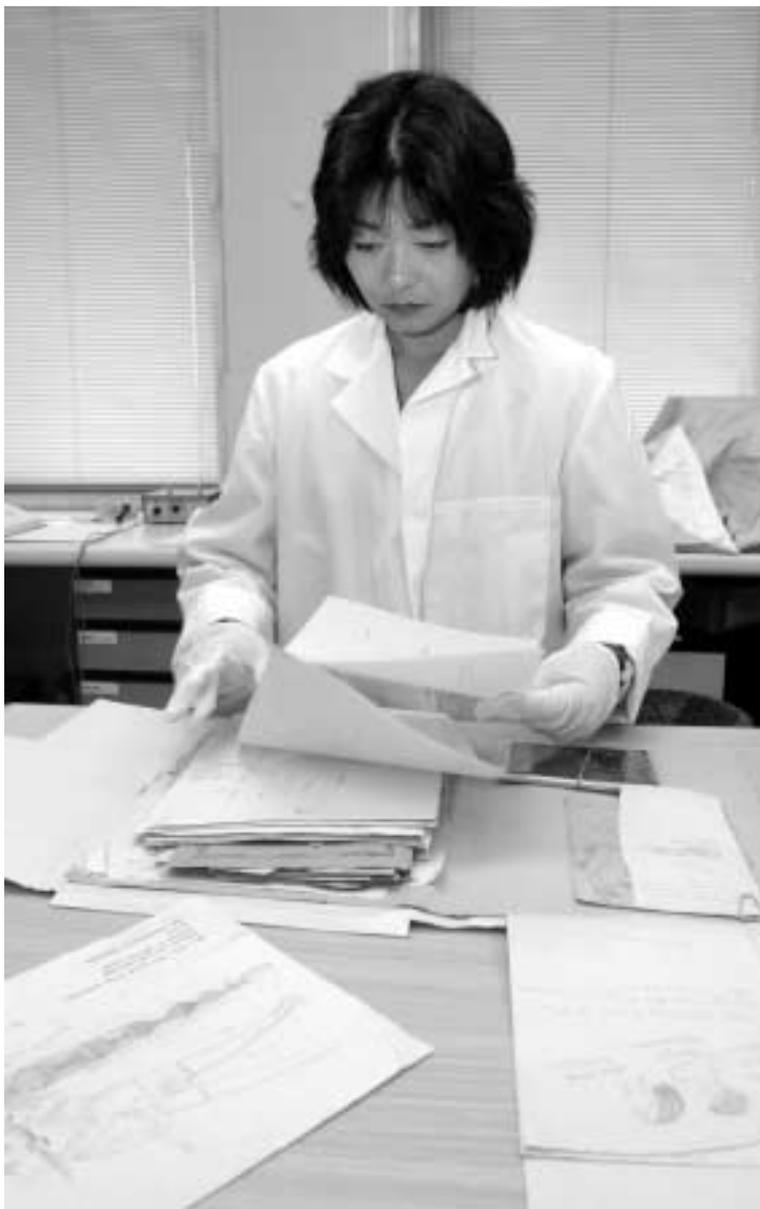
If this is unclear, they may be filmed in the order in which they are bound, provided that explanatory targets are used.

Fold-out material not included in the original volume should be filmed after the bound text.

#### Unpublished or archival materials

The *RLG Archives Microfilming Manual* points out that the requirements for physically arranging an archival collection in order are more stringent when it is to be filmed (Elkington, 1994). This means that items will need to be arranged at the individual document level as opposed to a more general 'folder' or 'sub series' level.

Filmed material that is out of order is likely to be of little use to users. Sorting of archival materials should be done by a curator, archivist or professional into a consistently arranged sequence e.g. by date, alphabetical, numerical or geographical.



*Archivist sorting materials*

The *RLG Archives Microfilming Manual* recommends that:

*... a general rule ... is to consider the natural order of how a reader would actually encounter or review the individual pieces.*

(Elkington 1994, p.28)

Other RLG recommendations are summarised below.

Feature	RLG recommended arrangement
letters	<ul style="list-style-type: none"> <li>• letters should be removed from their envelopes</li> <li>• envelopes, if filmed, should appear before their letter</li> </ul>
enclosures	<ul style="list-style-type: none"> <li>• enclosures should be filmed immediately after a letter</li> </ul>
loose materials	<ul style="list-style-type: none"> <li>• loose materials in a volume are normally filmed at the end with a target indicating their presence in the volume</li> <li>• if their placement is clear, they should be filmed 'in situ' with an enclosure target</li> </ul>
larger size folded maps, charts, illustrations	<ul style="list-style-type: none"> <li>• film in order that they appear (unless otherwise specified)</li> </ul>
annotations	<ul style="list-style-type: none"> <li>• annotations or identifying information on the back of a document or photograph should be filmed first</li> </ul>
indexes and finding aids	<ul style="list-style-type: none"> <li>• indexes and finding aids should be filmed prior to the material to which they refer</li> </ul>

(Elkington 1994, p.28, p.131)

**Scrapbooks** present special challenges, which are discussed further in the module, **Operating Microfilm Equipment—Cameras**.

**Exclusions**, such as duplicates and other materials that are not to be filmed, should be removed or flagged. Common examples of exclusions in unpublished materials are blank pages of notebooks and ledgers. In such cases a target should be prepared to indicate that this is the filming policy.

## Image programming

Image programming (reel programming) is the process of working out the contents of each reel or fiche before filming. It ensures, for example, that reel breaks occur at a logical point, such as the end of a month or year, or the end of a serial title or volume, or chapter.

Many of the microfilming texts recommend that the staff who handle the collation and preparation of targets should do the image programming, as they will know more about the items being filmed.

In each organisation clear guidelines and procedures for image programming should be developed.

The *Guidelines for Preservation Microfilming in Australia and New Zealand* suggest the following steps to be followed for microfilm and fiche. (National Library of Australia 1998, pp. 46–48).

These guidelines need to be used in conjunction with the information in the next section:

**Number of exposures.**

## Microfilm

Feature	Reel programming guidelines
individual titles	<ul style="list-style-type: none"> <li>film entirely on one roll rather than split between two rolls</li> </ul>
reel breaks for serials	<ul style="list-style-type: none"> <li>should always be <i>between</i> whole units such as volumes, years, months, etc. and not <i>within</i> units</li> </ul>
where one title needs more than one reel	<ul style="list-style-type: none"> <li>give each film a number appearing immediately after the <b>Start</b> target</li> </ul>
Combination—where several titles are filmed together on one reel	<ul style="list-style-type: none"> <li>include a Reel Contents target for easier use</li> </ul>
leaders and trailers	<ul style="list-style-type: none"> <li>include a minimum of 60 cm (24 inches) of blank film at the beginning and end of each film</li> </ul>
splitting—of master reel containing several titles into several use copies	<ul style="list-style-type: none"> <li>include enough additional film on the master to allow 60 cm (24 inches) of single titles of leader and trailer for each service copy</li> </ul>

## Microfiche

Feature	Reel programming guidelines
books	<ul style="list-style-type: none"> <li>film on consecutive fiche</li> <li>targets can refer reader to the next fiche</li> </ul>
serials	<ul style="list-style-type: none"> <li>start a new fiche for each logical break e.g. month, year, volume (this may add to the number of fiche)</li> </ul>
index	<ul style="list-style-type: none"> <li>an index of the fiche contents makes access easier</li> </ul>
fiche headings	<ul style="list-style-type: none"> <li>should be: <ul style="list-style-type: none"> <li>eye readable</li> <li>consistent throughout the series</li> </ul> </li> </ul>
headings—parts	<ul style="list-style-type: none"> <li>should include the following: <ul style="list-style-type: none"> <li>short title</li> <li>date</li> <li>individual fiche identification e.g. 1/20 = fiche number 1 of 20 fiche</li> <li>author/editor (for books)</li> <li>volume/issue number</li> <li>pagination—the page range e.g. pp.1–50</li> <li>section or chapter e.g. chapter 3</li> </ul> </li> </ul>

■ Activity 3.13

### Fiche and reel programming

a) Are the following reel and fiche breaks **acceptable** (A) or **unacceptable** (U) according to the above guidelines? Complete the table on the right hand side with an A or U.

Reel R or fiche F	Format of original	Reel or fiche break	Acceptable (A) or Unacceptable (U)
R	newspaper	Jan1–19, Jan 20—Feb 15	
R	newspaper	Jan 1-31	
F	serial	Vol. 1—Vol. 2 part 2, Vol. 2 part 3—Vol. 3 part 4	
R	books	Title 1 Title 2 Title 3	

b) List TWO things which should be considered during preparation if several book titles are to be filmed on the one reel.

(i)

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(ii)

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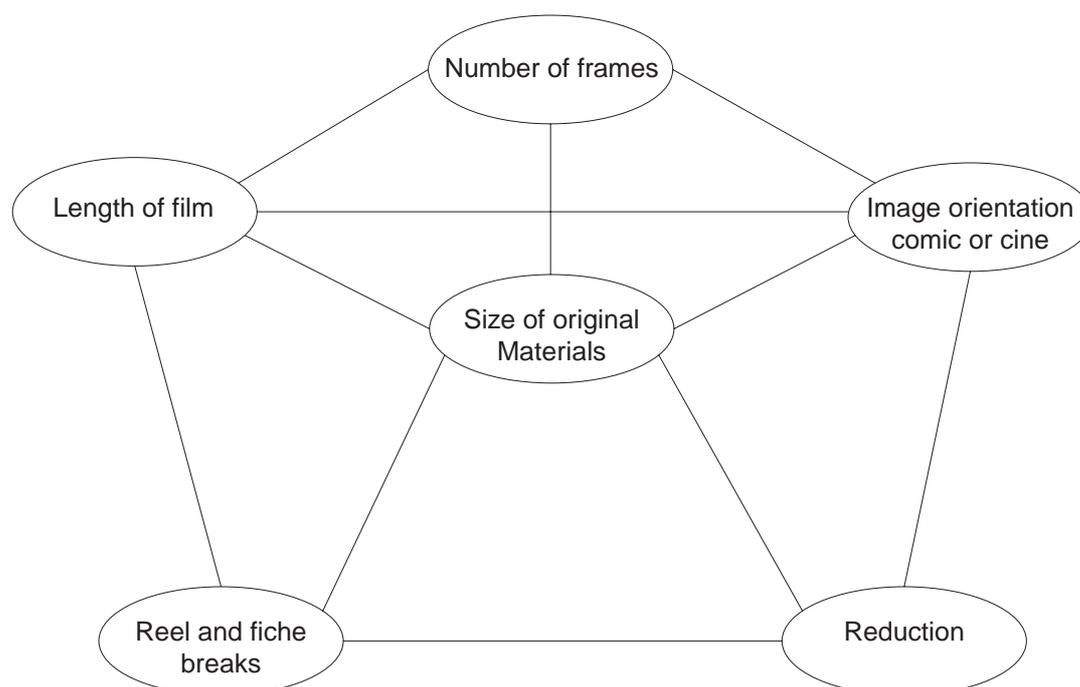
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### Number of exposures

Estimating the number of frames is a key part of image programming. The calculation of reel or fiche breaks cannot be done without an estimate of the total number of frames and how many are likely to fit on a reel or fiche.

In turn, this is linked to the:

- reduction ratio
- image orientation (comic or cine)
- size of the original materials
- length of the film (35mm film is now available in 30.5 metre (100 foot) and 40 metre (131 foot) rolls).



## ● Reflect 3B

### Image orientation

**Activity 1.8**, in Topics 4 & 5 of **Preservation Microfilming—Basics**, illustrated that the key to filming in comic or cine mode is usually the size, and in particular the *height* of the original material.

Depending on the camera, items larger than A3 size are often filmed in cine mode.

Ask your colleagues to show you examples of items filmed in **cine** mode. (The examples will usually include large maps, broadsheet (large size) newspapers and large manuscripts).

### Tables for image programming

There are a number of sources which have tables to help with calculating image programming. These include the RLG microfilming handbooks and Lisa Fox's *Preservation Microfilming* guide. (Elkington 1992 & 1994, Fox 1996).

Maximum Exposures: 40 Meter Reels

Height (A) Width (B) (inches)	Reduction Ratio													
	8	9	10	11	12	13	14	15	16	17	18	19	20	21
6	1,423	1,542	1,682	1,850	2,056	2,176	2,313	2,467	2,643	2,643	2,846	2,846	3,083	3,083
7	1,276	1,423	1,542	1,682	1,850	1,947	2,056	2,176	2,313	2,467	2,643	2,643	2,846	2,846
8	1,121	1,276	1,370	1,542	1,609	1,762	1,850	1,947	2,056	2,176	2,313	2,467	2,467	2,643
9	1,028	1,156	1,276	1,370	1,480	1,609	1,682	1,850	1,947	2,056	2,176	2,176	2,313	2,467
10	949	1,057	1,156	1,276	1,370	1,480	1,609	1,682	1,762	1,850	1,947	2,056	2,176	2,313
11	881	974	1,088	1,194	1,276	1,370	1,480	1,542	1,682	1,762	1,850	1,947	2,056	2,056
12		902	1,000	1,088	1,194	1,276	1,370	1,480	1,542	1,609	1,682	1,762	1,850	1,947
13		860	949	1,028	1,121	1,194	1,276	1,370	1,423	1,542	1,609	1,682	1,762	1,850
14			881	974	1,057	1,121	1,194	1,276	1,370	1,423	1,542	1,609	1,682	1,762
15			841	902	1,000	1,057	1,156	1,233	1,276	1,370	1,423	1,480	1,609	1,682
16				860	925	1,000	1,088	1,156	1,233	1,276	1,370	1,423	1,480	1,542
17					881	949	1,028	1,088	1,156	1,233	1,276	1,370	1,423	1,480
18					841	902	974	1,028	1,121	1,156	1,233	1,276	1,370	1,423
19						860	925	1,000	1,057	1,121	1,194	1,233	1,276	1,370
20							881	949	1,000	1,057	1,121	1,194	1,233	1,276
21							860	902	974	1,028	1,088	1,121	1,194	1,233
22								881	925	974	1,028	1,088	1,156	1,194
23								841	902	949	1,000	1,057	1,088	1,156
24									860	902	974	1,000	1,057	1,121

Image programming table

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## Microfilm

The previous table can be used to calculate the maximum number of exposures that will fit onto a 40 metre (131 foot) reel of 35mm film.

To use the table, look in the **left column** and find the appropriate line for the materials you are filming. Use their height if you are filming in **cine** (A) mode, or their width if you are filming in the **comic** (B) mode.

These positions are illustrated in Topics 4 & 5 of the module, **Preservation Microfilming—Basics**.

Across the **top of the chart**, find the column for the reduction ratio you are using. The cell where the two intersect shows the approximate number of exposures that can be included on a reel.

Allowances should also be made for:

- targets (approximately 20 frames)
- multiple exposures (used particularly with archival materials and materials which have illustrations)
- leaders and trailers (at least 60 cm, or 24 inches, at beginning and end of each reel, and between titles if more than one title is included on a reel)
- number of pages per frame e.g. whether one (positions IA and IB) or two pages (positions IIA and IIB) per frame are to be filmed. The number of exposures is usually calculated as one page per exposure. Divide this by two if filming in positions IIA and IIB.

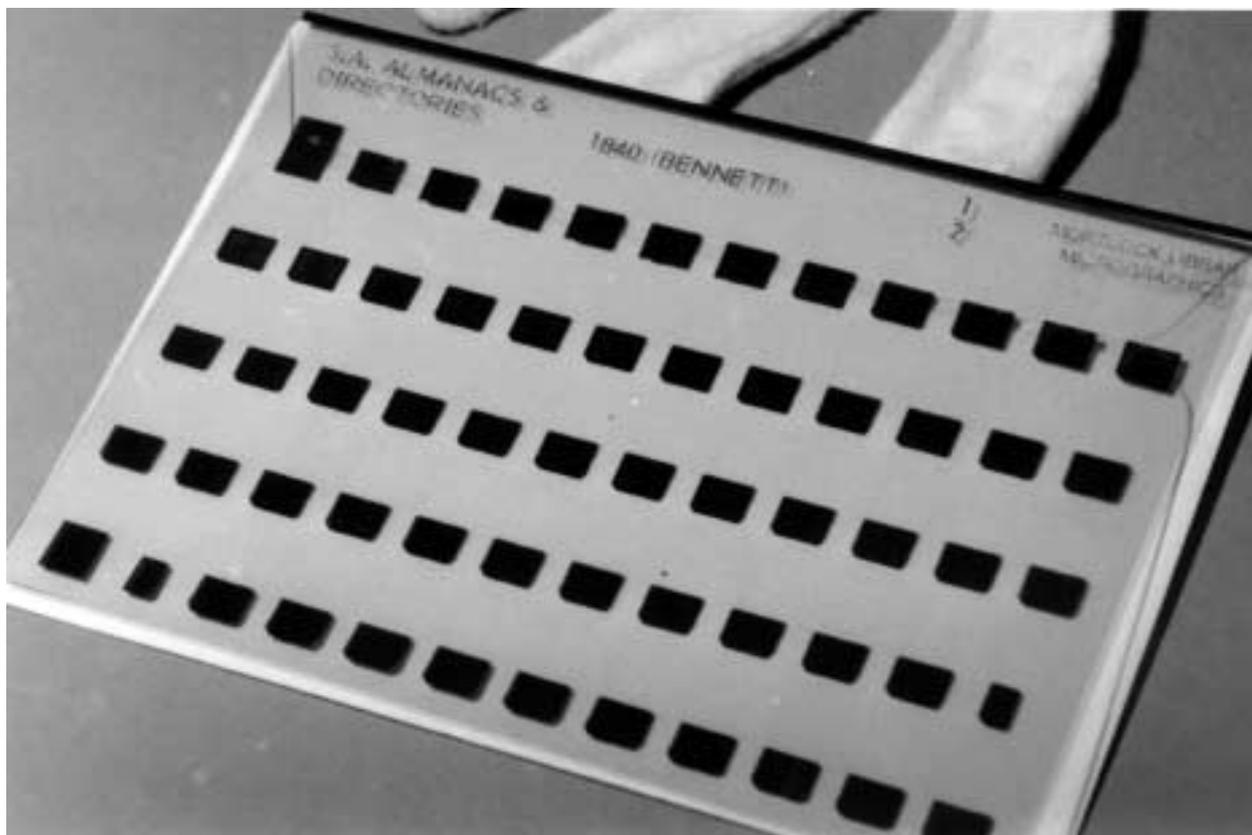
Reel programming is also closely linked to the quality and economics of using either comic or cine mode orientation. This is discussed further in module 5: **Operating Microfilming Equipment—Cameras**.

A microfilming bureau should also be able to provide advice on reel programming.

## Microfiche

Similar principles will apply to microfiche.

A common fiche arrangement is 60 frames (5 rows of 12 images) per fiche.



A common fiche arrangement – 5 rows of 12 images.

© Photograph courtesy of State Library of South Australia

## Formulas for reel programming

As an alternative to the tables, some organisations use formulas for reel programming. For example, the microfilming section of the State Library of Western Australia uses the formulas below which are based on those used by the Library of Congress.

### Number of images

A formula for calculating the number of images on a reel is:

$$\frac{\text{reduction ratio} \times \text{length of film}}{\text{width of item} + \text{separation between images}}$$

In the following example:

- the reduction ratio is 1: 15
- the separation between images is 3mm
- the width of the item is 560mm
- allowance for the length of film is 27,000mm (in a 30.5m film this allows for leaders and trailers).

$$\frac{15 \times 27,000}{560\text{mm} + 3\text{mm}} = 719 \text{ images per roll}$$

## Length of film

Similarly, it is possible to calculate the length of film required using the formula:

$$\frac{\text{no. of images} \times (\text{image width} + \text{separation between images})}{\text{reduction ratio}} = \text{length of film}$$

In the following example:

- the reduction ratio is 1: 15
- the separation between images is 3mm
- the width of the item is 560mm
- there are 719 images.

$$\frac{719 \times (560 + 3\text{mm})}{15} = 26,986, \text{ so a } \mathbf{27,000\text{mm}} \text{ film length required.}$$

## ■ Activity 3.14

### Calculating the number of images/reel split

Using the exposure table, calculate the maximum number of images that you could expect to film on a 40 metre reel of 35mm film.

a) Height 59 cm or 23 inches. Cine (A) mode. Reduction ratio 1:16.

---

b) Width 36 cm or 14 inches. Comic (B) mode. Reduction ratio 1:15.

---

c) Width 61 cm or 24 inches. Comic (B) mode. Reduction ratio 1:16.

---

d) Using the figure which you obtained in b) above, calculate a reel split for the following newspaper.

One year's worth of a weekly newspaper with 32 pages per issue. Height 59 cm or 23 inches. Cine (A) mode. Reduction ratio 1:16. Assume that each page needs a separate exposure.

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## Compiling targets

As described in the module **Preservation Microfilming—Basics**, targets are the equivalent of a book's title pages.

They provide:

- technical details about the filming (e.g. the reduction ratio)
- bibliographic details of the original material (e.g. title, dates, place, publisher)
- who is responsible for the project
- how to use the copy
- any irregularities in the original.

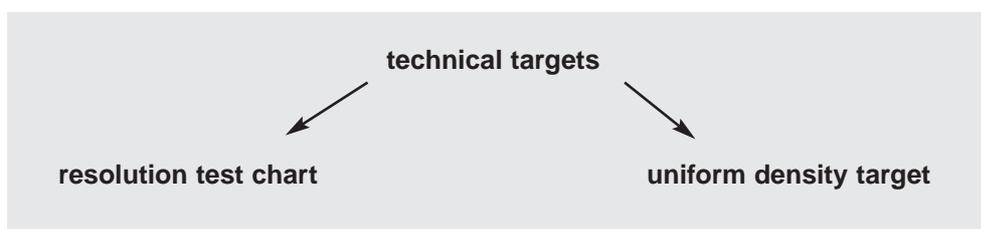
The following information is drawn from *Guidelines for Preservation Microfilming in Australia and New Zealand* (National Library of Australia 1998, pp. 49–56).

## Types of targets

There are broad categories of targets—**information** and **technical**. Each of these broad categories includes specialised types of targets.

### Technical targets

The technical targets consist of two specialist targets, the **resolution test chart** and the **uniform density target**.



The **resolution test chart** is filmed twice, on the frames immediately before and after the text. This enables the resolution level to be checked and the reduction ratio verified at the beginning and at the end of the film.

The resolution target has **five** charts, one in the centre and four in the corners, so that they correspond to the corners of the largest documents being photographed.

The **uniform density target** is used in quality inspection to check how well the camera lamps are balanced. The target is nothing more than a uniform white sheet of card stock or heavy paper. This target is also filmed twice—immediately before the start and before the end targets.

Only technical targets specified in the standard ANSI/AIIM MS 23 are suitable for preservation microfilming.

### Information targets

These are the most common targets, containing information about the original materials and the processes required to film them. Special types of information targets are shown in the following table.

Type	Types of information target	
	Details	Where placed
standard information targets	commonly used targets e.g. start of reel, end of reel	at beginning and end
identification target	a brief version of the bibliographic target containing short title, volume date etc.	at beginning
bibliographic details target	a detailed and systematic list of information which helps to identify publications e.g. author, title, dates, publisher, volume	at beginning
list of irregularities target	an overall summary of missing issues, problems with numbering etc. (problems are also highlighted individually in <b>quality targets</b> which appear in the main sequence)	at beginning
copyright target	contains copyright details	at beginning
filming details target	contains details of the operator, the camera, and which date the items were filmed	at beginning
quality targets	give individual details of problems e.g. missing pages irregular pagination, illegible or damaged pages, which are filmed in with the main text before the page or section they describe (an overall summary is provided in the <b>list of irregularities</b> target which appears at the beginning)	in sequence of main text
continued on next reel targets	gives details if the item or set continues	at end
source of the original material targets	acknowledges the source of any borrowed material e.g. filmed from the holdings of the National Library of Vietnam	at beginning

## Preparing targets

If the microfilming is to be done by an external organisation such as a bureau, it is likely that the bureau can prepare the **technical targets** and **standard information targets**, such as **Start, End of Reel**.

Examples of standard information targets are provided below.



### *Examples of standard information targets*

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© 1995 by the American Library Association.*

The library or original owner will need to prepare the more complex targets such as the **list of irregularities** and **bibliographic** details for targets. Librarians can assist with providing **bibliographic** details such as title changes.

For international users, it is worthwhile preparing the targets in several languages.

Targets should be of the highest quality. If the equipment is available they should be prepared on a word processor and printed on the best available printer. Otherwise prepare targets using the neatest and best option. All targets must be proofread for errors.

In some cases, it may be possible to copy bibliographic information direct from a library's catalogue entries.

### Target sizes

Some information targets are 'eye-legible', meaning that they can be read from the film without magnification. They provide visible breaks in the sequence of frames, drawing the reader's attention to important information.

Examples of targets that are usually eye-legible are **bibliographic targets** and **quality targets** (in the sequence of the main text.)

Type size (or 'font' or 'point' size) of the target will depend upon the reduction ratio. You may need to experiment with point size and targets.

Eye-legible targets are not recommended for microfiche due to the high reduction ratios used and the availability of eye-legible information on the headers.

### Target orientation

Targets can be produced and filmed to follow cine or comic mode. One orientation should be used consistently throughout a reel/sequence/job.

Targets that contain related information (e.g. bibliographic) may be filmed side-by-side in a single frame. However, targets should never be filmed in the same frame as the original material.

### Typical target sequences

Microfilming standards and guidelines specify a particular order or sequence for targets.

The target sequences for books and serials on roll film or fiche are similar. However, fewer mandatory (compulsory) frames are required with preservation microfiche. This is because the header usually contains relevant eye-legible information and room is limited—generally only 60 frames per fiche.

Microfilming standards and guidelines specify particular target sequences. Most of these are similar, with minor variations. With each microfilming project it is important to clearly specify the particular sequence to be used, and to use it consistently.

Here is a typical sequence of targets. Compare this sequence with others that you have seen or used.

#### Further information on targets

For further information, it is worthwhile checking out the sequence of targets in the standard ANSI/AIIM MS28, and the detailed sequence described in the Australian and New Zealand *Guidelines* (National Library of Australia 1998, pp.50–56).

Typical target sequence



Start Target

Identification target

Technical Target-resolution



Technical Target-Uniform density

Filming target details

Bibliographic details target



Copyright Statement

List of Irregularities

TEXT



End

Technical Target-resolution (repeated)

The *Guidelines* sequence is reproduced below.

<p><b>Typical target sequences</b> The target information and sequences for monographs and serials filmed on microfilm or microfiche are similar, although preservation microfiche generally carry no more than approximately 60 frames per fiche and the header usually contains eye-legible information about the title, so fewer mandatory targets are required. A typical sequence of targets is provided below, with notes on their applicability.</p> <p><b>1. START</b> Microfilm Frequency: each reel Type of production: standard Minimum type size: eye legible Requirements: mandatory Microfiche Frequency: each sheet Type of production: standard Minimum type size: large type Requirements: optional</p> <p><b>2. REEL CONTENTS</b> Microfilm Frequency: each reel Type of production: custom Minimum type size: eye legible Requirements: optional If more than one title is filmed on the reel, this target lists each title in sequence under the heading 'REEL CONTENTS'. Volume numbers and the date range covered should also be listed if serial titles are being filmed.  Microfiche Not applicable. If multiple titles are filmed within a microfiche series, additional access may be provided through an index fiche which appears at the beginning or end of the microfiche series.</p> <p><b>3. IDENTIFICATION TARGET</b> Microfilm Frequency: each title; at the start of each reel where more than one reel required Type of production: custom Minimum type size: large type Requirements: mandatory Microfiche Frequency: first microfiche for each title Type of production: custom Minimum type size: large type Requirements: mandatory The identification target should include the year of filming, the name of the organisation commissioning the work and the name of the bureau filming the material using words such as 'Microfilmed by [vendor] for [institutions] 1999'. This target should also indicate the reduction ration. If the filming is part of a larger project it should be named here with the names of any separate funding agencies or partners in the project.</p> <p><b>4. SOURCE OF ORIGINAL MATERIAL</b> Microfilm and microfiche Frequency: each title Type of production: custom Minimum type size: large type Requirements: optional This target acknowledges the source of any borrowed original material, using words such as 'Filmed from the holdings of the State Library of Victoria'.</p> <p><b>5. COPYRIGHT STATEMENT</b> Microfilm and microfiche Frequency: each title Type of production: standard Minimum type size: large type Requirements: mandatory if material is in copyright There are two issues to be addressed: the rights of the copyright owner of the original material, and the copyright that may exist in the microform reproduction of the original material. The following notice, which is typical of those that institutions have used as a standard target for filming published material, is inadequate on both issues: All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the original copyright holder.</p>	<p>Instead, it is proposed that wording be used similar to the following which was prepared by ACLIS: At the time of filming, the material filmed was in copyright. [The name of the institutions] has produced this copy for preservation purposes either to protect or to replace a deteriorating original item which was no longer commercially available, and/or with the permission of the copyright owner. The right of users to make further copies from this copy is restricted to private research and study purposes subject to the conditions set out in the Copyright Act. [The name of the institution] has copyright in this microform reproduction. Apart from private research and study purposes subject to the conditions of the Copyright Act, copying is not permitted without the written permission of [the name of the institutions]. The whole statement would be used when filming material in copyright; only the second paragraph would be used when filming material out of copyright.</p> <p><b>6. BIBLIOGRAPHIC RECORD TARGET</b> Microfilm Frequency: each title Type of production: custom Minimum type size: eye legible Requirements: mandatory Microfiche Frequency: each title Type of production: custom Minimum type size: large type Requirements: mandatory For monographs the bibliographic record target consists of a descriptive entry of the item based on information supplied on the title page according to AACR2 (2nd edition of Anglo-American Cataloguing Rules). For serials it consists of the title, volumes and date range of the issues contained on the reel cited according to AACR2. If a title is too long to be accommodated on the target sheet, either a short title followed by an ellipsis (...) or an abbreviated version should be used. If the bibliographic description is based on information contained elsewhere in the volume, that source should be noted in square brackets, e.g. [cover title], [caption title], etc. Additional information which is not printed on the original should also be included in square brackets. Two bibliographic targets may be created: one for the title and statement of responsibility, the other for the imprint commencing with the words: 'Originally published...'</p> <p><b>7. REEL NUMBER</b> Microfilm Frequency: each subsequent reel of microfilm Type of production: standard Minimum type size: eye legible Requirements: mandatory when a title appears on more than one reel Microfiche Not applicable This target is not required for microfiche as the fiche number is already recorded on the header.</p> <p><b>8. LIST OF IRREGULARITIES</b> Microfilm and microfiche Frequency: each title Type of production: custom Minimum type size: regular type Requirements: Mandatory if there are irregularities A typewritten explanation or list of irregularities is not always necessary but should be used if there are any missing pages, issues, mutilations or abnormalities which might confuse a reader or need to be documented.</p> <p><b>9. BEST COPY AVAILABLE</b> Microfilm and microfiche Frequency: each title Type of production: standard Minimum type size: large type Requirements: mandatory if applicable This target is used when the item to be filmed is incomplete or imperfect and a better copy cannot be located.</p> <p><b>10. TECHNICAL TARGET</b> Microfilm and microfiche Frequency: at least once per title; preferably before and after text Type of production: standard Minimum type size: not applicable Requirements: mandatory This target is required to allow the film resolution to be assessed. It consists of an arrangement of resolution test patterns; it may also include a</p>
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photographic grey scale and information on the reduction ration. If the material being filmed is very large, the test patterns should be distributed over the full frame to record the resolution at all parts of the base board. Because this target is meant to document the resolution at which the material is filmed it should appear close to the text and in the case of microfilm must not be spliced in later.

## 11. UNIT TARGET

Microfilm  
Frequency: each volume  
Type of production: custom  
Minimum type size: eye legible  
Requirements: mandatory when filming multi-volume works

Microfiche  
Frequency: each volume  
Type of production: custom  
Minimum type size: large type  
Requirements: mandatory when filming multi-volume works  
This is placed at the beginning of each volume to identify the volume number.

## 12. IN-TEXT TARGETS (QUALITY TARGETS)

Microfilm  
Frequency: as required  
Type of production: standard or custom  
Minimum type size: eye legible  
Requirements: mandatory  
Microfiche  
Frequency: as required  
Type of production: standard or custom  
Minimum type size: large type  
Requirements: mandatory

The text of the time is filmed, including front and back covers and blank pages, with quality targets filmed as necessary. They are filmed in the frame before the page or section they describe. The camera operator is usually alerted to the need to insert a target by previously inserted flags or fliers. The filming agreement may require the bureau to film further quality targets if they are needed.

Quality targets may describe any significant problems, including:

- Damaged page(s)
- Incorrect pagination
- Irregular pagination
- Missing page(s)
- Missing volume(s)
- Missing issue(s)
- Missing month(s)
- Missing year(s)
- Illegible pages(s)
- Original volume tightly bound

If a volume contains a large number of blank pages it may be acceptable to include a target stating 'Blank pages have not been filmed'. Where possible, the information on quality targets should be as specific as possible, e.g. 'Page numbers 55-70 missing from original volume'.

## 13. TECHNICAL TARGET

Microfilm and microfiche  
Frequency: each title  
Type of production: standard  
Minimum type size: not applicable  
Requirements: optional in this location  
The technical target may be repeated at the end of the text.

## 14. END OF TITLE

Microfilm  
Frequency: each title  
Type of production: standard  
Minimum type size: eye legible  
Requirements: mandatory for every title filmed  
Microfiche  
Frequency: each title  
Type of production: standard  
Minimum type size: large type  
Requirements: optional for every title filmed

## 15. CONTINUED ON NEXT REEL

Microfilm  
Frequency: each reel if necessary  
Type of production: standard  
Minimum type size: eye legible  
Requirements: mandatory if the item or set continues  
Microfiche  
Frequency: each fiche if necessary  
Type of production: standard  
Minimum type size large type  
Requirements: optional if the item or set continues

## 16. END OF REEL: PLEASE REWIND

Microfilm  
Frequency: each reel of microfilm  
Type of production: standard  
Minimum type size: eye legible  
Requirements: mandatory for every reel of microfilm  
Microfiche  
Not applicable  
NOTE: If more than one title is filmed on one reel of microfilm, the appropriate targets should be repeated as necessary in sequence for each title.

### *Guidelines sequence*

In most situations you will probably not need to produce such detailed targets. However, this information has been included in these training materials so that you can refer to it in the future if the need arises.

Note especially the:

- I quality targets**
- I continued on next reel targets**
- I targets which acknowledge the source of the original material.**

## ■ Activity 3.15

### Targets

Use the information on targets on the previous pages to answer the following questions.

a) Briefly describe the information that you would find in the following targets:

list of irregularities

---

---

copyright statement

---

---

identification target

---

---

bibliographic details target

---

---

technical target

---

---

quality targets

---

---

---

---

b) Label the following targets in a sequence in the boxes below.

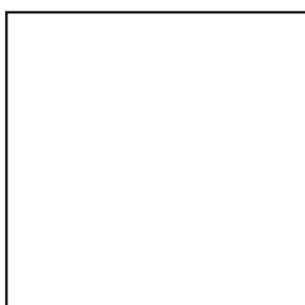
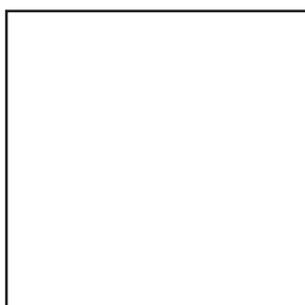
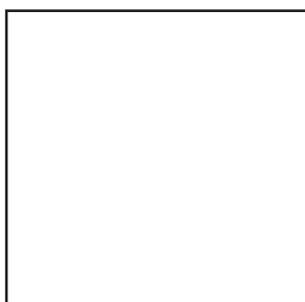
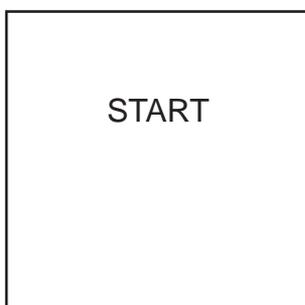
- start
- list of irregularities
- end
- copyright statement

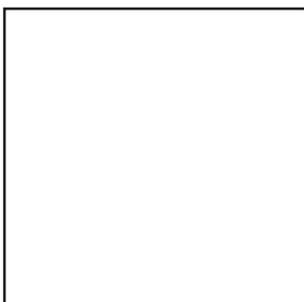
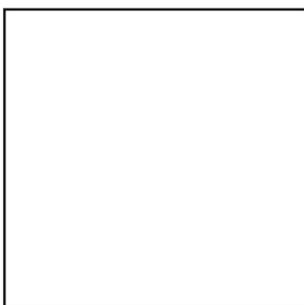
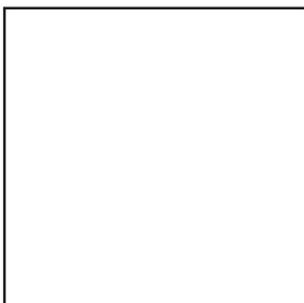
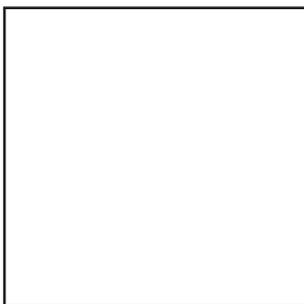
- l identification target
- l uniform density—operator, camera, date—first copy near beginning
- l technical target at beginning
- l bibliographic details target
- l technical target repeated at the end
- l filming details—operator, camera, date—second copy at end
- l label two separate boxes as TEXT to represent the frames of microfilmed text.

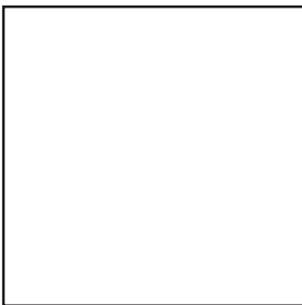
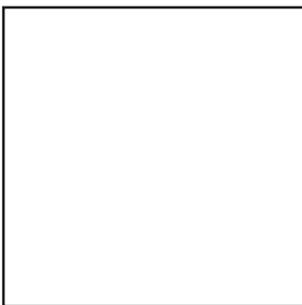
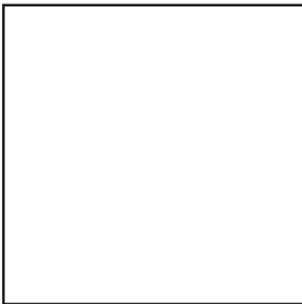
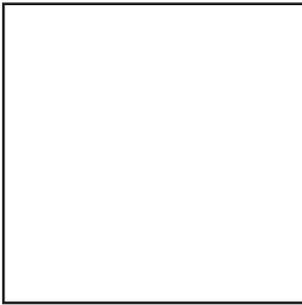
TEXT

TEXT

(The first label has been included as an example.)







## Summary

- Taking time to prepare original items in a logical sequence results in microfilms that are easier for readers to use.
- Image programming is the process of working out the contents of reels or fiche before filming.
  - It involves making sure the reel and fiche breaks occur at logical points.
  - The calculation of reel or fiche breaks cannot be done without an estimate of the total number of frames and how many are likely to fit on a reel or fiche.

- I In turn, this is linked to the:
  - reduction ratio
  - image orientation (comic or cine)
  - size of the original materials
  - length of the film.
- I Targets provide information about the item being filmed and should be produced to the highest quality. They include technical targets (such as uniform density and resolution) and targets with bibliographic details.

## Checklist

In order to test your understanding of this material, work through the checklist below.

If you can answer 'yes' to each question, and you have completed the activities for this topic, you are now ready for your lecturer or assessor to verify that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities**.

If you are in any doubt about any of the content, you should read through the material again, consult some of the references mentioned in the section entitled **Resources**, talk to your work colleagues or contact your lecturer or mentor.

I can:

- I compile materials to be filmed in the correct order
- I program images
- I compile correct targets for a microfilm project.

## ▲ Submit

You are now ready to record in your **Log book** that you:

- I can meet the **performance criteria**
- I have satisfactorily completed the **activities** for this topic.

You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify this information.

---

# Topic 6

---

## Follow established copyright procedures

### Performance criteria

You will have achieved the performance criteria for this topic when you can:

- I interpret appropriate copyright legislation as it applies to preservation microfilming projects
- I follow standard procedures for locating the owner of copyright for materials to be microfilmed
- I list the conditions under which a microform product may attract copyright.

### Copyright implications

Copyright issues were introduced in Topic 3 of **Preservation Microfilming—Basics**. This section discussed the two major copyright issues to be addressed with microfilm—the rights of the original copyright owner, and the copyright that may exist in the microfilm reproduction.

**Activity 1.5** in Topic 3 of **Preservation Microfilming—Basics**, required you to check out relevant copyright legislation for copying both published and unpublished materials in your own country or a country of your choice.

Depending on your local organisation, you may or may not have to deal with copyright issues. However, even if you do not have to deal with copyright, it is important to be aware of the issues. This will help you to be alert to any problems and could save you and your organisation a lot of trouble. Remember that if you break a law, ignorance is usually not an excuse.

### Guidelines

Here are some basic guidelines that are adapted from the Genealogical Society of Utah *Camera Operator's Manual* information on preparing documents (Genealogical Society of Utah, 1998):

1. Do not film material in copyright unless the project manager has already obtained written authorisation.
2. Always check with your supervisor if a document or publication contains:
  - I the symbol ©
  - I the word copyright
  - I a publisher's name and publication date.

Remember that, as with all legal issues, you should always first seek professional legal advice in interpreting copyright laws. The professional advice will provide you with some guiding principles under which you can operate at a day-to-day level.

The following activity gives you an opportunity to interpret copyright information at a basic level.

### ■ Activity 3.16

Basic interpretation of copyright legislation

Use the information which you researched for **Activity 1.5** in, **Preservation Microfilming—Basics**, to interpret the following. Answer by marking the boxes below ✓ **yes** or ✗ **no**.



### Books (monographs)

If a book is still in copyright, seek clearance from the publisher. Tell the publisher that you want to duplicate further copies for sale to other institutions. In some countries with sale copies, a licence or royalty will need to be paid.

Publisher details can be obtained from sources such as telephone and business directories and the internet. Librarians can also help in locating addresses.

### Serials

Seek clearance from the publisher. Again, tell the publisher that you wish to duplicate further copies for sale. A licence or a royalty may need to be paid.

(To comply with existing Australian law, when filming serials, *technically* clearance should be obtained from the copyright owner for *each article* contained in the serial, unless it can be proved that 50 years have elapsed since the death of the author.

However, as this would be difficult in practice, it is recommended to contact the publisher.)

### Newspapers

Seek the advice of an expert with newspapers. Copyright for newspapers can be very complex, as several parties may own copyright just for one article. The newspaper publisher owns the copyright of the paper itself, but journalists or photographers may own copyright on some articles or photographs.

### Unpublished materials

With unpublished materials, such as diaries and manuscripts, the copyright may be ongoing (perpetual). Seek permission from the family or next of kin.

Telephone directories and electoral rolls are useful sources for finding addresses. Ask a librarian for suggestions.

### Unsuccessful attempts

Attempts to locate the copyright owner should be recorded **in writing** and stored with the records for the preservation microfilming project.

Sometimes a major portion of a work is to be filmed and the copyright owner cannot be found. In this case, the *Guidelines for Preservation Microfilming in Australia and New Zealand* recommends that the filming organisation places a notice in a publicly available source, such as a government gazette.

A sample of suitable wording is provided below. Again, check with a legal expert in your country for advice on steps to follow if a copyright owner cannot be located.

#### INTENTION TO MICROFILM

The National Library of Australia Canberra ACT 2600 hereby gives notice of intention to microfilm ..... which was published between ..... Any person claiming to be the copyright owner of the above-mentioned title should contact ..... at ..... at the earliest available opportunity by telephone:....., facsimile:....., in writing:.....

#### *Example of an Intention to publish notice*

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**I can:**

- I interpret appropriate copyright legislation as it applies to preservation microfilming projects
- I follow standard procedures for locating the owner of copyright for materials to be microfilmed
- I list the conditions under which a microform product may attract copyright

### ▲ Submit

You are now ready to record in your Log book that you:

- I can meet the performance criteria
- I have satisfactorily completed the activities for this topic.

You can record these by marking off the boxes in the shaded columns with a ✓ **yes** or ✗ **no**.

You can then ask your lecturer or assessor to verify this information.

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## Background

The training materials have been developed by the National Library of Australia, in collaboration with the State Library of South Australia and under the auspices of IFLA PAC, and will be provided to people within the Asia and Pacific regions as a training resource. The materials will also be used within Australia as part of an accredited TAFE training course.

The training materials consist of 10 modules, 6 wall charts, a Log Book, a Learning Guide and a Glossary/Index. We expect that users will both read a printed version of the materials and download them as PDF files from the National Library of Australia's website – [www.nla.gov.au](http://www.nla.gov.au)

