# **Archiving Various Items**

# To give/send to people #1 Commenced June 2003

# This is the first in a series of information that we/I hope will be useful to people.

There will be lots of information that will be passed on so that people can archive or perhaps restore their own data. By the word "data" is meant information in various forms. There is valuable data in peoples homes that will be of interest to future generations. Personal data and non-personal data.

This includes papers, documents in paper forms, art pictures and paintings.

Images which means photos in various forms. Prints, slides, movie film, video.

Sounds in various formats.
Old cylinder, 78RPM and vinyl discs. Even sound in digital format.

There are businesses that do archiving for a fee but it can be expensive. The alternatives are to do it yourself or get a friend to do it. I hope to give some guidance in this regard at a later date.

#### Do It Yourself

Firstly there lots of things that people can do right now to start the process before the data may become lost.

There are archival forms of materials that are made especially made for archiving purposes such as paper, "plastic" covers and photo albums. Where best to move data that may be stored now in a bad area such as in a damp or hot place. Most people can start by storing all vinyl records, sound cassettes, video tapes and Compact Discs (CDs) in a vertical position, **NOT** laying flat.

Precious photographs should be hung in a dull lit place, not somewhere where the room is bright with sunlight streaming into the room.

Later on there will be information as to what to do with items and how to archive them. A lot of people will not be able to do some or all of the archiving so will need someone else to perform the duties, such as a relative, friend or even a commercial business.

### What can be done now?

The first thing that needs to be done can be done by most people without any outside help or expertise.

I will run through quite briefly here to show the reader or should I say archiver, an outline of what is suggested by world-wide authorities. Later on I will present in more detail the various subjects. It is up to the home archiver to do what may be considered necessary on any subject. I would like to think that people want to do what is best so that history is not not lost, that future generations have the information.

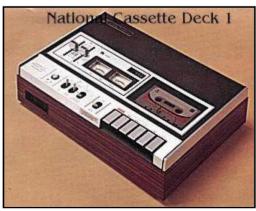
#### Sound Records

Cylinder 78RPM 45RPM33 1/3RPM and 16 2/3 RPM. Cleaning

Most records can be cleaned with special solutions which are available or can be made up.

While most of the lacquer records respond readily to cleaning solutions, a few isolated examples tend to retain a wax-like deposit that is resistant to some cleaning solutions. A supplemental solution for cleaning such records is under development. More about this later.





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#### Record onto tape





If a sound system or stereo is available which has a record turntable and a sound tape cassette recorder then the record sounds should be simply recorded onto cassette tape. If a record turntable is connected to a cassette deck with the appropriate cables then the disc sounds can be recorded onto cassette tape.

On page one is pictured a Toshiba stereo with a record turntable and National cassette recorder deck.

Above is a record changer that plays record discs and a National cassette recorder.

These are the items that one could use to start archiving data, in this case **sound**.

Sound Tapes

Do not touch the playing surface/s of any recording.

Clean hands before handling recordings.

Handle all grooved discs, 78s, 45s, 33LPs and acetate discs, by their edge and label areas only. Handle compact discs by outer edge and centre hole only.

This is the label of one of Marie and my wedding



78RPM discs that was made in 1960. I have since recorded it onto R-Reel tape and recently onto cassette tape.

Tape, Open Reels Handle by the outer edge of the reel flanges and centre hub areas only. Do not squeeze flanges together as it will damage tape edges.

Tape, Cassettes, Audio and Video

Handle by outer shell only. Do not place fingers or any other materials into openings.



Handle by inserting middle and index fingers in the centre hole, then gently spread them to just keep the cylinder from slipping off. Do not touch the grooves of wax cylinders because they are very susceptible to mould. Wax cylinders should be at room temperature before touching; the thermal shock from



the warmth of your hand can cause cold wax cylinders to split.

#### **Storage**

General

Keep all discs and tape both open-reel and cassettes standing upright, on edge. Store cylinders standing on their ends. Do not lay any recording flat, not even audio or video cassette tapes.

Estimation of Magnetic Tape Life Expectancies (LEs)

Magnetic tape degrades by known chemical processes. When the kinetics of these processes is fully understood, the degradation mechanisms can be modeled and the life expectancy (LE) of tapes can be estimated. The binder systems used in today's audio and videotapes are generally based on polyester polyurethanes. These polymers degrade by a process known as hydrolysis, where the polyester linkage is broken by a reaction with water. One of the by-products of this degradation is organic acids. These organic acids accelerate the rate of hydrolytic decomposition. Furthermore, the acids can attack and degrade the magnetic particles.

## **Paper**

#### How do I preserve my family papers?

Paper preservation requires proper storage and safe handling practices. Your family documents will last longer if they are stored in a stable environment, similar to that which we find comfortable for ourselves; 16c to 21c degrees, 40-50% relative humidity (RH) with clean air and good circulation. High heat and moisture accelerate the chemical processes that result in

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em-brittlement and dis-colouration to the paper. Damp environments may also result in mould growth and/or be conducive to pests that might use the documents for food or nesting material. Therefore the central part of your home provides a safer storage environment than a hot attic or damp basement.

Light is also damaging to paper, especially that which contains high proportions of ultra violet, i.e., fluorescent and natural day light. The effects of light exposure are cumulative and irreversible; they promote chemical degradation in the paper and fade inks. It is not recommended to permanently display valuable documents for this reason. Colour photocopies or photographs work well as substitutes.

Insects. Paper contains ingredients, such as gelatin and glue sizing, wood pulp and flour paste, which are appealing to insects. Cockroaches, silverfish and termites are the most common destroyers of paper. Silverfish love dark places and can make nice little homes inside frames as they nibble on sizing and wood pulp. Termites like anything made of cellulose, as well as wood, so a rag paper picture in a wood frame is susceptible. Cockroaches can cause damage to paper by eating glue sizing or any painting media containing sugar.

- 1) Clean picture frames regularly.
- 2) Never store works of art in dark, damp places such as basements or attics.

## **Photographs**

#### How to archive printed photos?

In years to come, you'll cherish your photo memories



more and more. Make sure the pictures remain as vibrant and crisp as they were the instant you took them. Here are several ways to make sure your photos last a long time.

This is a photo of my mother taken in the 1920s.

Using the right supplies. Always look for "archival

quality" photo album materials. They are designed to be chemically inert, which means your pictures won't dissolve, fade, or deteriorate. Your inkjet paper and ink should be equally dependable through the years. HP inkjet cartridges and HP Premium Plus Photo Paper create true-to-life colour photos that resist fading for up to 65 years. Other printer manufacturers also have their

claims.

Creating an album

The best place to store your printed photos is in an album. But be sure you choose the right kind. The two primary types are strap-closing books and three-ring binders. Strapped books might put unnecessary pressure on the photos, which could eventually lead to pages sticking together. Always be sure to store these types of albums in an upright position. And be sure to watch out for three-ring binders that don't close all the way - you could lose a page. Otherwise both work well; just choose a cover design that matches your personality.

Once you choose the album, you'll need to find some archive quality album pages, photo corners, page protectors, pens, and anything else that will help preserve your memories. When selecting album pages, look for acid-free and lignin-free pages. Acids in paper break down the chemical composition of photos. Lignin, from wood pulp, causes the same yellowing and damage.

Also look for plain pages without adhesives. Unless marked as an archive-quality adhesive, the glue can cause your photos to become yellow and gummy over the years. Instead, use archive-quality photo corners, they may take more time, but aren't your pictures worth it?

### Computers and Digital

Most of the items to be archived can be stored or archived onto digital machinery. Onto hard disk drives, tape drives, Compact Discs (CD).

This is a subject of its own which only a very small percentage of the masses (people) can do at present. One must not become of one mind about archiving onto modern technology as it changes frequently. This is my main argument of not relying on this form of archive. It is all very nice at present, but in a decade or so the archived data may not be accessible at all.

If data is archived this way then it is up to future generations or ourselves if we live long enough, to keep re-archiving the data onto the new format or technology. So that's all at present regarding digital archiving.

#### Inform Your Predecessors

We need to let our children, grandchildren and possibly great grandchildren or relatives where the data, archived or not is kept. Where the data is stored in our home, unit, bank or where ever. I suggest a list of the data should be distributed to relatives or people you

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consider should know and to certain people where the
data is stored. This should also be included in peoples
will/s.
====== end ======

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