IFLA International Newspaper Conference


11-13 April 2012
BnF, Paris

With the support of:
Newspaper storage at the British Library

IFLA International Newspaper Conference
Paris 11 – 13 April 2012

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British Library – St. Pancras
Basement storage at St. Pancras
Colindale storage
Colindale – red rot and loose boards
Brittle paper
- Sample of c.400 items assessed (+/- 5% accuracy)
- Low score = low preservation need/low priority
- High score = high preservation need/high priority
BL results: condition (% STABLE / UNSTABLE)
Newspapers = 15% unusable 19% ‘at risk’
Boston Spa
Newspaper Storage Building - facts

- Based on the design of additional storage building (building 31), but with a smaller footprint
- High density
- 24 metre high bay
- Fire prevention – reduced oxygen 14.9%
- Capacity 132 km to store some 750 million pages of local, regional and national newspapers
Construction January 2012
March 2012 construction newspaper building
Architects model of racking and crane
Scale....
Fire suppression – low oxygen
Nitrogen store
Air tightness
New building footprint =

- Will contain approximately 287,000 volumes of newspapers on 35,000 stacks

- There are 7 different stack footprints, from 380mmx310mm for the smallest, to 1020mm x 770mm for the largest

- Stacks are stored and transported on carrier trays, with multiple stack configurations on all trays except the largest
Newspaper on trays – 7 sizes with different configurations
Test Cell 2011
40cm high stack
Moving the newspapers
Newspaper how to..... condition and
Methodology – shrink-wrapping
Shrink-wrapping
Shrink-wrapped volume
Shrink-wrapped parcels
Assets and Acetate degradation – the path of decay

Path of autocatalytic decay

[Graph showing the relationship between acidity and time, with high acidity leading to vinegar syndrome.]
Acetate degradation

Cracking/crazing of the film base

Bubbles of acid in the film base
Vindon Scientific Ltd – (Rochdale, Lancashire)
Science & Pharmaceuticals
BL Preservation Cold Store at Vindon Facts & figures

- Steady controlled temperature at 5°C (1° tolerance)
- Steady controlled RH at 35% (3 % tolerance)
- 24hr secure monitoring with emergency back-up and disaster recovery
- Online retrieval process
- Secure remote access to database of holdings
- Dedicated acclimatisation room to allow film to be retrieved and processed safely
- Dedicated work space for BL staff for collection management activities
BL Preservation Cold Store at Vindon - the space (appx. 900m²)
BL Preservation Cold Store at Vindon - the cold rooms
BL Preservation Cold Store at Vindon
- the cold rooms
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BL Preservation Cold Store at Vindon - the cold rooms

- rooms designed & built on site

- shelving & ducting is grade 304 stainless steel

- vertical rear plenum located at the rear of each room

- air is attracted at high level through this plenum by fan(s).

- air is then passed over the cooling coils to floor mounted ducting system where the “conditioned” air passes into the room through adjustable vents.

- shelves are perforated for maximum exposure to conditioned air
From this...
...to this
From this...
...to this
Moving the microfilm collection into the new storage suite at Vindon has had a major impact on the preservation of the collection:

- The doubling of free acidity in actively degrading film
  → Increased from 10 years to 200 years
- The development of acidity in films not actively degrading
  → Increased from 80 years to 350 years
- Natural age rate (non-acetate)
  → Reduced from “moderate” to “very slow”
- Preservation Index (PI = units = years, the higher the PI the better conditions are for preserving organic material)
  → Increased from 63 years to 488
Thank you

Happy to take questions?