

Weighing Alternative Solutions for Long-Term Preservation of Military & Civilian Personnel Records



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Background

- NARA has 2 facilities in St. Louis, Missouri that do not meet facility standards
 - 36 CFR 1228 Subpart K for storage of temporary and preaccessioned agency records;
<http://www.archives.gov/about/regulations/part-1228/k.html>
 - NARA Directive 1571 for storage of archival records
- Strategic Plan Goal to meet the standards in Fiscal Year (FY) 2009

Existing St. Louis Facilities

- NRPM stores the inactive official military personnel files (OMPFs)
 - 56 million files = 1.5 million cubic feet of OMPFs designated as permanent
- NRPA stores 19,070 c.f. archival



- NRPC stores the inactive official personnel files (OPFs)
 - Over 800,000 cubic feet of OPFs
 - Currently being appraised

The Records

- 1885 to 2003
- The vast majority of the records are Paper based
- Fire struck NPRC (MPR) on July 12, 1973
 - Destroyed 6th floor of facility & and approx. 18 million records
 - NPRC has “reconstructed” over 4 million records
 - 8% of the holdings records that survived the fire are charred and/or moldy
 - NRPC houses 68,000 cubic feet of deteriorating acetate based x-rays



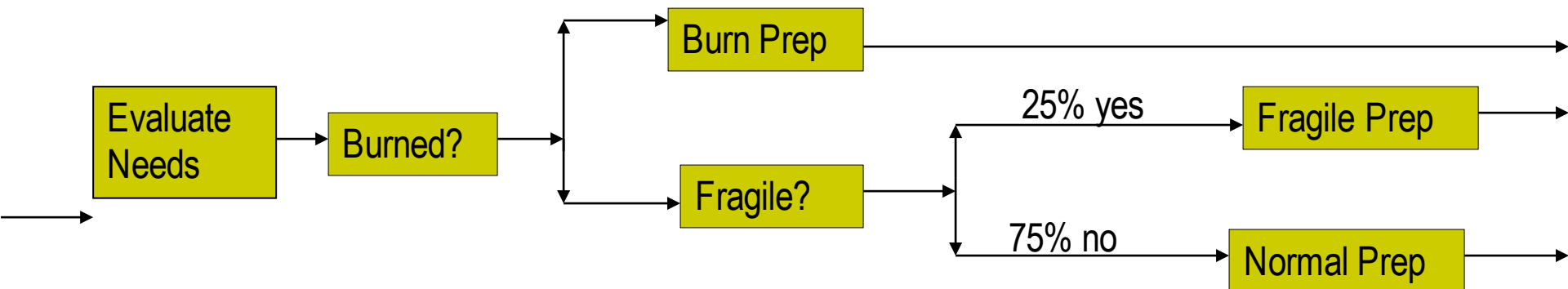
How is collection used?

- ❑ Current use of OMPFs – primarily veteran's benefits & entitlements
- ❑ Current use of OPFs – primarily reinstatement, and benefits
- ❑ NRPM receives 4,000-5,000 requests daily, 1 million annually
 - 45% of OMPF requests are answered by form DD-214
 - Other requests are more extensive
- ❑ Predicted Future use of the records
 - Historians
 - Genealogists
 - Other Researchers



SIMRECORD Process

- Modeling tool to simulate options and calculate costs
- Contract computer simulation to evaluate and calculate options – SIMRECORD by DanSources, Inc.
 - Based on CACI software
 - Integrates process mapping
 - Event driven simulation and activity based costs





Analyzing the SIMRECORD Options

- ❑ Scenarios included 6 business processes; storage, preservation, reformatting, indexing, and reference
- ❑ Variable attributes were input for costs, rates, and time.
- ❑ Reports were generated for analysis

Value of Environmental Control for Records Retention

	Temp.	RH	Aging rate	Mold growth	Preservation Index	Photo storage	Value to Records
No a/c	88°F	65%	Very fast	None	8 yrs.	No, too warm & damp	Poor degrades quickly
Office a/c	75°F	50%	Fast	None	27 yrs.	Okay	Good
Office a/c low temp.	70°F	50%	Fast	None	39 yrs	Okay	Good
Office a/c low RH & temp	70°F	45%	Moderate	None	44 yrs	Okay	Better
NARA 1571	64°F	35%	Slow	None	85 yrs	Okay	Even Better
Better than 1571	50°F	35%	Slow	None	244 yrs	Okay	Best ₈

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Air Handling Unit Options

1. Custom AHU in compliance with NARA 1571 at start-up
2. Custom AHU with upgrade to NARA 1571 later
3. Modular AHU with upgrade to custom AHU in compliance with NARA 1571 later

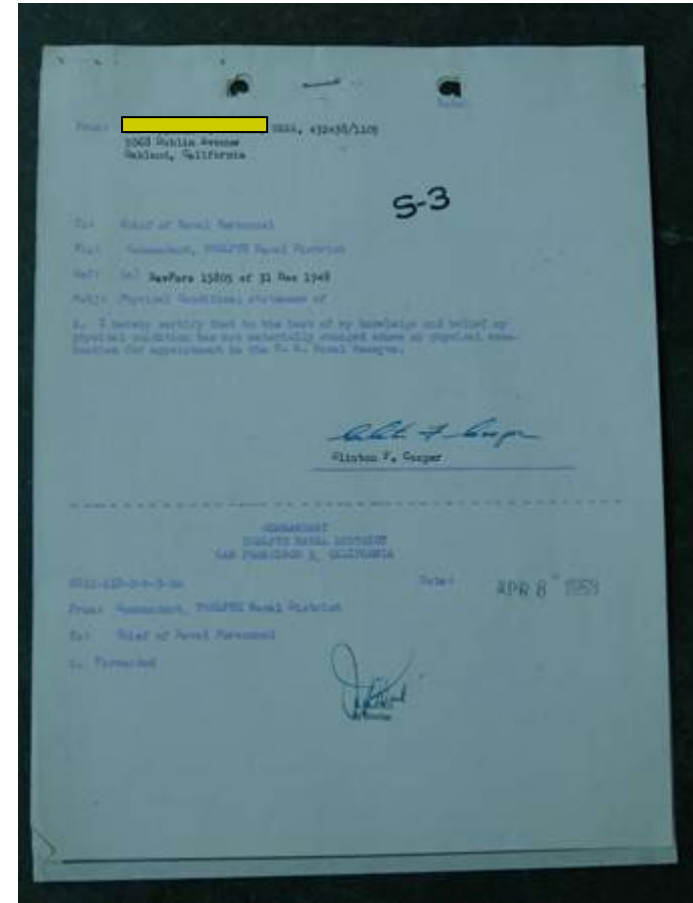
Options & Scenarios

- ❑ Lease facility) above or below ground in St. Louis or elsewhere
- ❑ Reformat all or some of the personnel records
- ❑ Destroy or keep originals
- ❑ Level of document preparation
- ❑ Level of quality assurance
- ❑ Access

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Reformatting Challenges

- Documents vary in thickness and size
- Low contrast between media and substrate often caused by the aging process
- Fragile and brittle records require more time to ensure careful handling
- Records may need conservation treatment before reformatting, including removal of fasteners, humidification and flattening



Reformatting Costs

Reformatting Option	Estimated Cost	Return on Investment
Digitize all OMPFs	\$4.55 billion	222 years
Digitize all post-1947 OMPFs	\$676 million	43 years
Digitize all post 1947 DD-214s	\$12 million	3 years
Microfilm all OMPFs	\$4.76 billion	1000+ years

Storage Options

- Agency records must be stored in up to 250,000 cubic foot bays
 - Permanent must meet ASHRAE standards for office air conditioning and air quality
 - Temporary
- Archival records must be stored in up to 125,000 cubic foot bays
 - Temp/RH controlled
 - Particulate controls
- 3 Basic storage options:
 - Conventional, 14' high shelves (15 c.f. high), manual retrieval
 - High Bay, 30'-40' high shelves, mechanical retrieval
 - Automated Storage & Retrieval System (ASRS), up to 100' high storage, fully automated retrieval



Conventional Storage

- ❑ Commonly used throughout NARA
- ❑ Cheapest to construct
- ❑ Requires larger footprint than High Bay or ASRS
 - Higher rent
 - Large footprint can add cycle time to file retrieval & re-filing processes



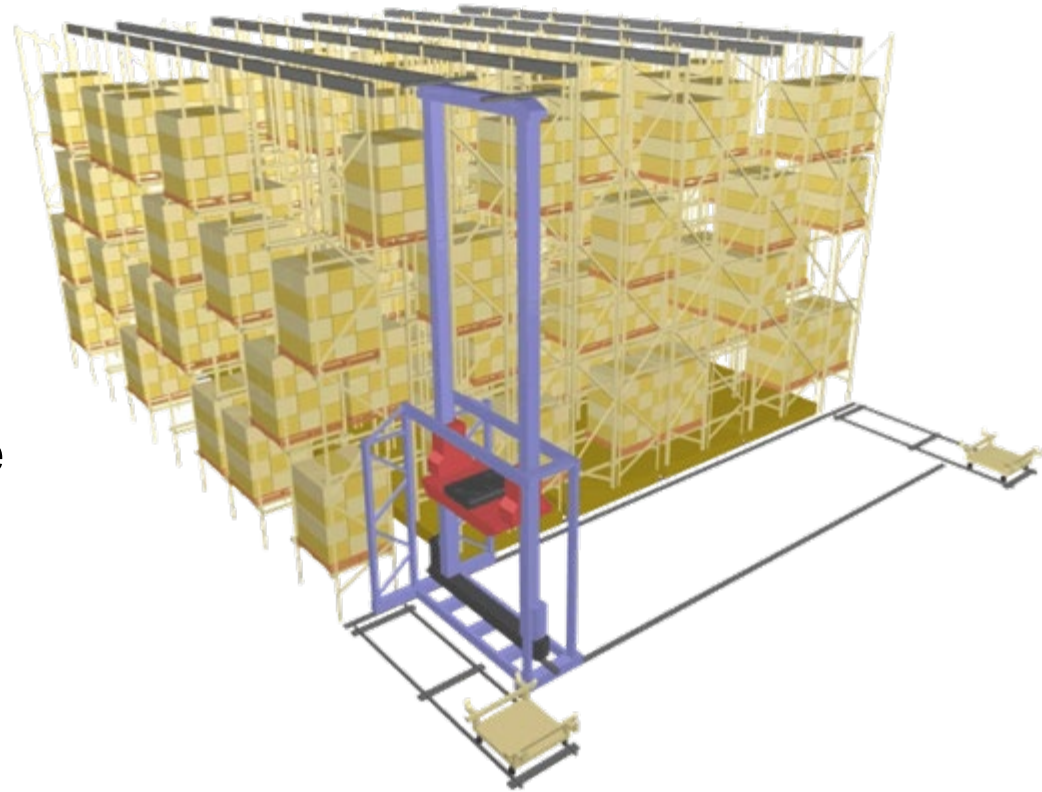
High Bay Storage

- ❑ Developed as efficient way to store infrequently used holdings
- ❑ Several libraries & archives using system
- ❑ Requires holdings to be in electronic database for retrieval & storage
- ❑ Requires human operators
- ❑ Cheaper rent & utilities than Conventional



Automated Storage & Retrieval System

- Totally automated storage & retrieval system
- Utilized in variety of industries
- Utilizes high bay storage (up to 100')
- Requires all holdings to be in electronic database
 - Integrates with ASRS software
- High costs to construct
- Lower rent & utility costs



Evaluating the Storage Options

	Conventional	High Bay	ASRS
Up-Front Investment	Low, utilizes standard metal shelving	Significant (construction, creating electronic databases)	High (Specialized construction, database creation)
Rent & Utilities Costs	Higher due to footprint	Lower than Conventional	Lowest due to smallest footprint
Operating Costs	Low, periodic shelving replacement, directional signs	Higher, equipment maintenance & repair & software upgrades	Highest, equipment maintenance & repair, software & hardware upgrades
Principal Value	Low costs	Ability to find things, efficient	Quick retrieval, gets humans out of stacks Lower rent & utilities



Storage Options for NPRC

- NARA is planning to replace NPRC facilities to comply with storage standards for temporary & archival records
 - 2009-2011 time frame
 - Over 4 million cubic feet total holdings
- Planning & evaluation of storage options during 2004 & 2005
 - Conventional easiest to do, but requires larger facility/higher rent
 - High Bay may have some application for portions of holdings
 - ASRS most likely too expensive due to up front investment
- Still have a lot of work to do



Almost the End

Special Thanks:

- ❑ The Office of Regional Records Services (NR)
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