Deciphering Facility Reports

November 8, 2019
11:30am – 12:00pm
Presenters

• Sebastian Encina
  – Collections Manager, Kelsey Museum of Archaeology, University of Michigan
  – Chair, Collections Stewardship of AAM - [https://www.collectionsstewardship.org/](https://www.collectionsstewardship.org/); collections@aam-us.org
  – UM Collections Committee Chair

• Amy Hahn, CFPS
  – Fire Protection Engineer, Certified Fire Protection Specialist
  – Insurance property engineering for 17 years
  – Risk Strategies for 4 years
  – Former firefighter/EMT

• Mary Pontillo
  – Risk Advisor to many estates, artist-endowed foundations as well as all other aspects of the art world
  – National Fine Art Practice Leader and manages Fine Art team
  – Claims, Underwriter, Broker for 16 years
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Background

• Previous GFR from 2008
• AAM approached Collections Stewardship
  – To update
  – To simplify
  – To make more accessible
• Not reinvent form or start from scratch
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Committee

• A diverse and broad committee created
• Representing various museum disciplines, sizes, and careers
  – Darlene Bialowski, Principal, Darlene Bialowski Art Services, LLC
  – Aisha Burtenshaw, Chair, UK Registrars Group, Head of Registrars & Exhibitions, Ashmolean Museum of Art and Archaeology
  – Geneva Griswold, Associate Objects Conservator, Seattle Art Museum
  – Jeff Minett, Senior Vice-President, AON Huntington T. Block Insurance
  – Hallie Winter, Collection Manager/Registrar, American Indian Cultural Center & Museum
Changes 1

- Less sections
  - Combined some sections
  - Rearranged questions to flow better
- Less questions
  - Removed redundancy
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Changes 2

- Optional sections
  - If your institution doesn’t meet a criteria, can skip many sections

- Included updated technology
  - For example, LED lighting

*I/We attest that by checking the following boxes, I/we confirm the borrowing institution (Borrower) is not within an environmental disaster zone, and intends to keep loan materials within its own facility. Thus, I/we am/are submitting the short form of the General Facility Report:

- [ ] Borrower is NOT in an earthquake or earth movement zone
- [ ] Borrower is NOT in a flood zone
- [ ] Borrower is NOT in a hurricane zone
- [ ] Borrower is NOT in a tornado zone
- [ ] Borrower is NOT in a brush or urban interface zone
- [ ] Borrower will NOT use an external shipping/packing facility
- [ ] Borrower will NOT display or store in location besides own primary facility

If any of these are not marked, complete the long form.
Questions re-worded
- Less jargon, more accessible

Form more inclusive of institutions with parent organizations
- Campus museums, public museums, etc.

1.03 Check the type(s) that best describe your institution:

- Museum □ nonprofit or □ profit
- □ Aquarium
- □ Arboretum/Botanical Garden
- □ Art
- □ Children/Youth
- □ General
- □ Historic House
- □ History
- □ Natural History/Anthropology
- □ Nature Center
- □ Science
- □ Zoo
- □ Other (specify): ____________________________

- University/College
  - □ Museum or Gallery
  - □ Student Center/Union
  - □ Department: ____________________________
  - □ Other (specify): ____________________________

- Cultural Organization
  - □ Archive
  - □ Religious Institution
  - □ Fair Building
  - □ Other (specify): ____________________________

- Government Institution
  - □ Agency
  - □ Consulate
  - □ Other (specify): ____________________________

- Private For-Profit Institution
  - □ Business
  - □ Gallery
  - □ Other (specify): ____________________________
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Future work 1

• Final form to be presented at AAM 2020 in San Francisco?
• Finalize a short form?
• Multi-lingual?
  – Empezar con la versión español?
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Future work 2

- Future work is now!
- We want to hear from you!
- GFR is a living form, needs updating and editing
- We can’t do this without you.
- Yes, YOU!

WE WANT YOU!
Goals

• Better understanding of General Facility Report

• Ability to recognize “red flag” conditions


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Topics for Discussion

– Geographic Profile
– Building Construction
– Fire Protection
– Security
– Insurance
Geographic Profile

*I/We attest that by checking the following boxes, I/we confirm the borrowing institution is not within an environmental disaster zone, and intends to keep loan materials within its own facility. Thus, I/we am/are submitting the short form of the General Facility Report:

☐ Museum is NOT in an earthquake or earth movement zone
☐ Museum is NOT in a flood zone
☐ Museum is NOT in a hurricane zone
☐ Museum is NOT in a tornado zone
☐ Museum is NOT in a brush or urban interface zone
☐ Museum will NOT use an external shipping/packing facility
☐ Museum will NOT display or store in location besides own primary facility

If any of these are not marked, complete the long form.
Geographic Profile

Resources

- Property/Fine Arts Insurance Broker/Agent
- Property/Fine Arts Insurance Carrier
- FEMA Online (https://msc.fema.gov/portal/home) – US only flood maps
- Local Building Department
- Local Fire Department
- SwissRe CatNet® (Global Natural Hazard Database)
Geographic Profile - Earthquake
Geographic Profile - Flood

- **FEMA Flood Zones**
  - Zone A – exposed to 100-yr event, unknown depth
  - Zone AE – exposed to 100-yr event, depth determined
  - Shaded Zone X – above 100-yr event, but exposed to 500-yr event
  - Unshaded Zone X - outside of flood zone, above 500-yr event
  - Zone VE – exposed to 100-yr event plus coastal storm surge, depth determined
Geographic Profile - Wildfire
2. Building Construction, Configuration and Maintenance

GENERAL

2.01 What year was the original building constructed? 
What building materials were used?

2.02 Are there newer additions since the original construction? □ Yes □ No
What year was/were the addition/s constructed?
What building materials were used?

2.03 What type of fire resistant materials were used?

2.04 Is there carpeting in any space where loan items will be held? □ Yes □ No

2.05 Are all building structures freestanding? □ Yes □ No
If no, provide a physical description and the purpose of the larger structure into which it is incorporated
and how building access is restricted/monitored:

If no, are the structures separated by fire doors? □ Yes □ No
Building Construction

Resources

• Property/Fine Arts Insurance Broker/Agent

• Property/Fine Arts Insurance Carrier

• Local Building Department

• Local Fire Department
Building Construction

- Two most common classification systems in US:
  - NFPA (National Fire Protection Association) Construction Type for Fire Service (5 Types)
  - ISO (International Organization for Standardization) Classifications for Insurance (6 Classes)

- International uses IBC or other local classification

- Always know which system is being referenced
  - Insurance companies will use ISO and Fire Departments will refer to NFPA
  - In the case of Section 2.4, the NFPA types are referenced

- In all classification systems, buildings are classified by highest hazard present
Building Construction

NFPA 5000 Construction Types

- Type I: Concrete construction, think parking garage
- Type II: Steel with or without fireproofing
- Type III: Ordinary, mixed masonry/wood
- Type IV: Heavy timber, think mill buildings
- Type V: Stick construction, 2x4s, think residential
Building Construction

ISO Construction Classes

- ISO 1 – Frame – Combustible walls and/or roof
- ISO 2 – Joisted Masonry (JM) – Noncombustible, masonry walls with wood frame roof
- ISO 3 – Noncombustible (NC) – Typically steel frame walls with masonry in-fill. Steel framing is load bearing.
- ISO 4 – Masonry Non Combustible (MNC) – Concrete block, reinforced masonry or tilt-up concrete load bearing walls.
- ISO 5 – Modified or Semi Fire Resistive (MFR or SFR) – Protected steel and/or concrete or heavy masonry load bearing walls and floors.
- ISO 6 – Fire Resistive (FR) – Reinforced concrete construction frame and floors and/or very well protected steel and concrete.
Building Construction

- Fire Resistive
  - Refers to properties or designs to resist the effects of any fire to which a material or structure can be expected to be subjected.

- Fire Retardant
  - A material that has been treated with a liquid, solid, or gas that tends to inhibit combustion when applied on, mixed in, or combined with combustible materials
  - Only as good as the application and maintenance
Building Construction

- Fire Walls
  - Can be rated 1 hr, 2 hr, 3 hr or 4 hr
  - NO penetrations
  - Delay the spread of fire, but will not necessarily stop it

- Fire Doors
  - Typically have rating 30 minutes less than fire wall installed on
  - MUST be visibly labelled
  - Drop down doors must be tested annually
  - Do NOT block open

Can you find the labels below?
Building Construction
Red Flags

• Construction Types
  - Wood Construction
  - NFPA Type III-V
  - ISO Class 1 or 2
  - Use of plastics

• Water Intrusion
  - Flood zone other than “X”
  - Below grade areas
  - Openings at/below grade
  - Sloping land toward building

• Water Source Above
  - Drainage piping
  - Water piping, domestic or fire protection
  - Restrooms above

• Construction Projects
  - Where?
  - What is involved?
  - How long?
  - Precautions?
Section 4 – Fire Protection

Passive Fire Protection vs. Active Fire Protection

• Passive – a group of systems that compartmentalize a building through the use of fire-resistance rated walls/floors.
  – Compartmentalizing the building into smaller sections helps to slow or prevent the spread of fire/smoke from one room to the next.
  – Helps to limit the amount of damage done to a building and provides its occupants more time for evacuation.
  – Includes fire/smoke dampers, fire doors, and fire walls/floors.

• Active - a group of systems that require some amount of action or motion in order to work efficiently in the event of a fire.
  – Actions may be manually operated, like a fire extinguisher or automatic, like a sprinkler, but either way they require some amount of action.
  – Includes fire/smoke alarm systems, sprinkler systems, and fire extinguishers as well as firefighters.
Section 4 – Fire Protection

There are four ways to extinguish a fire:

• Cool the burning material
• Exclude oxygen
• Remove the fuel
• Break the chemical reaction

Methods of extinguishment:

• Fire Extinguisher
• Automatic Fire Protection System
• Manual - Fire Department
This question, in the US, refers to the interior materials and finishes of the building based on ASTM E84 test. The three classifications are:

- Class A – flame spread index of 0-25 and smoke developed index of 0-450
- Class B – flame spread index of 26-75 and smoke developed index of 0-450
- Class C – flame spread index of 76-200 and smoke developed index of 0-450

Europe uses the classification for materials, surface linings, pipe insulation and cables. Each category has a different reference letter and number depending on combustibility.
# Section 4 – Fire Protection

### 4.6 How is the fire/smoke detection/alarm system activated? (Mark all that are appropriate.)

<table>
<thead>
<tr>
<th>System activation</th>
<th>Temporary exhibition galleries</th>
<th>Temporary exhibition Storage areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-activated heat detection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-activated smoke detection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual pull stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water flow switches in sprinkler system</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Manual Pull Station](image1.png)

![Sprinkler Alarm Switches](image2.png)
Section 4 – Fire Protection

Fire Detection

- Flame Detectors
  - Respond to a radiant energy of flame, sparks or glowing embers.

- Smoke Detectors
  - Standard type - Ionization or Photoelectric
  - Specialized – Very Early Warning Fire Detection (VEWFD)

- Heat Detectors
  - May be either "spot" or "line" type and operate at a fixed temperature or on a rapid increase in temperature (rate-of-rise). Some detectors combine the fixed and rate sensitive principles.
Section 4 – Fire Protection

4.7 Who does the fire alarm system alert (mark all that are appropriate)?

☐ Proprietary central station (specify): ________________________________

☐ Local audible alarms

☐ Local fire station - direct line (if ALL systems do not automatically register at the fire station, indicate which ones do not): ________________________________

☐ University/government/parent institution central station (specify): ______________________

☐ UL/FM central station (specify company): ________________________________

☐ Other (specify): ________________________________

Fire Alarm Monitoring

• Local/Proprietary Station
  – Alarms are monitored by on site personnel but do not leave the site
  – Manual notification to Fire Department

• Master Box
  – Fire Alarm Control Panel is connected via phone line or wireless to the Fire Department dispatch
  – Automatic notification to Fire Department

• Central Station
  – Monitored by a third party contractor 24/7
  – Fire Alarm Control Panel automatically sends alarm to Central Station
  – Manual notification by third party to Fire Department
Section 4 – Fire Protection

4.8 Indicate the type(s) of fire suppression system(s) in the following areas (mark all that are appropriate):|

<table>
<thead>
<tr>
<th>Sprinklers</th>
<th>Loading Dock</th>
<th>Storage</th>
<th>Galleries</th>
<th>Year Installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet pipe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry pipe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-action</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Wet type has pipes filled with water and only requires sprinkler activation to discharge.
- Dry type has pipes filled with pressurized air. When a sprinkler head activates, the air is released and the pipes fill with water to discharge on the fire.
- Pre-action type has pipes filled with air but requires both the sprinkler head activating and at least one fire detection device activating to discharge water onto a fire.
- Water mist systems are becoming more popular for high value/sensitive storage
Section 4 – Fire Protection

<table>
<thead>
<tr>
<th>Gaseous fire suppression systems</th>
<th>Loading Dock</th>
<th>Storage</th>
<th>Galleries</th>
<th>Year Installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean agent 1 (type)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean agent 2 (type)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify):</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Fixed Gaseous Systems

- Most common Clean Agents: Halon, Inergen, FM-200, Novec 1230 or CO₂
- Halon is no longer available in US but still installed in some buildings
- Work by breaking chemical reaction or by inerting oxygen to suppress fire
- Agent concentration must be maintained to be effective
- Ideally activated by smoke detection and backed up by sprinkler system
Portable fire extinguishers

<table>
<thead>
<tr>
<th>Loading Dock</th>
<th>Storage</th>
<th>Galleries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specify type (e.g., pressurized water, carbon dioxide, dry chemical, foam, Halon, acid, other):

Portable Fire Extinguishers

- Most common types: ABC, Wet/Dry Chemical, Halon, Clean Agent, Water or CO₂
- Standard ABC are dry chemical and will leave potentially damaging residue
- For sensitive materials (art work/electronics) Clean Agent, water or CO₂ are the preferred extinguishers
Section 4 – Fire Protection

4.16 Is the local fire station staffed 24 hours a day? □ Yes □ No
If no, explain how personnel are alerted: ____________________________
What is the town class number for the fire department? (NB 4, NB 5, NB 9)? _______________

• Fire Department
  • Town Class Number is the Public Protection Classification (PPC) for the Town/City.
  • PPC can be gotten from FD or Insurance Broker/Carrier.
• Pre-planning with the FD is extremely important for any businesses with high value items to reduce property damage.
Section 5 – Security

5.25 What types of detection equipment are in operation (mark all that are appropriate):

- Magnetic contacts
- Photo electric beams
- Ultrasonic motion detectors
- Sonic sensors
- Break glass sensors
- Other (specify):

If yes to CCTV, how long are recordings archived?

- CCTV
  - Many types depending on needs and conditions
  - Recording capabilities
  - Live monitoring
  - Who controls and who has access
Section 7 - Insurance

• Requirements via Loan Agreement – Overrides COI

• Add “...warranty that there is ample coverage for all consigned/loaned items in your care during the period of this loan...”? Thoughts?

• Red Flags:
  – Flood Zone
  – Hurricane-prone location during Hurricane season (June 1 – Nov 30)
  – Wildfire-prone
  – Major city - Terrorism
Section 7 - Insurance

7. Insurance

7.1 How are collections insured (mark all that are appropriate)?
- Self-insure
- University/Government/Parent Institution
- Fine Arts Insurance
- Other (specify):

7.1b If coverage is through a fine arts insurance company (completely or in addition to self-insurance)
Company/agency: ________________________________

7.2 How long has the institution carried insurance with this company/agency? ___________

- What if Borrower is self-insured or part of a University, etc.?
- Do you recognize the broker’s name/agency?
- Why does it matter?
Section 7 - Insurance

7.3 Mark all coverage for loan objects covered under the insurance policy:
- All-risk museum coverage, wall-to-wall (while on exhibit and in transit), subject to the standard exclusions
- Coverage against burglary and theft
- Coverage against fire
- Coverage against rising water and water damage
- Coverage against natural disasters (i.e., earthquake)
- Coverage against mysterious disappearance
- Coverage against employee dishonesty
- Coverage against acts of terrorism

7.4 What are the applicable, non-standard exclusions of the policy affecting loan objects?

- Ask for a copy of the full policy including any Endorsements that may affect the loan.
Section 7 - Insurance

7.5 What are the deductible limits of coverage for loan objects?

• If there is a deductible for Loaned Objects, ask that this be covered by Borrower via the Loan Agreement.
Section 7 - Insurance

7.6 Have there been any individual damages or losses to permanent, loaned or borrowed collections incurred within the last three years (whether or not a claim was filed)?

☐ Yes ☐ No

If yes, state the date of damage or loss, circumstances and cause (including incidents due to vandalism or unruly behavior), extent of the damage or loss, and whether there was litigation or subrogation to determine blame or negligence:

What precautions have been undertaken to prevent any further incidents?

• What is the nature of the claims they have had?
• Facility-based? Transit?
• Get more information
• Severity and Frequency
Section 7 - Insurance

7.7 If your institution is self-insured, attach a copy of the Self Insurance Statute or provide a verification statement from your institution in the space provided below.

• Indemnity
  – What’s your opinion? What do you accept?
  – Pros
  – Cons

• International Loans
  – A tale