



# DARAC

(Disability Access Review and Advisory Committee)

## Meeting Minutes

Thursday, October 27, 2022

Microsoft Teams Conference Call

- 1. Call to Order.** The meeting was called to order by Chair Marsha Mazz at 12:00 p.m. on October 27, 2022, via Microsoft Teams.
- 2. Committee Attendees.**

The members and a guest introduced themselves.

Present	Name	Position
Y	Marsha Mazz, Chair	United Spinal Association
Y	Jessica Hubert, Vice-Chair	Guardian Services, Inc.
Y	Rocky Burks	Retired Access Manager, D.O.T, City of Sacramento, CA
Y	Kevin Brinkman	National Elevator Industry
Y	Glenn Hedman	University of Illinois at Chicago, Assistive Technology Unit, Department of Disability & Human Development,
Y	Tom Norton	Norel Service Company
N	Stephen Spinetto	Retired ADA Commissioner, City of Boston
Y	Scott Windley	U.S. Access Board
Y	David Whalen	Niagara University
Y	Kevin Carr	NFPA Staff
Y	Linda MacKay	NFPA Staff
Y	Michael Pallett	(Guest)

- 3. Chair/Vice-Chair Remarks.** The Chair and Vice-Chair thanked the U.S. Access Board, and David Yanchulis and Phillip Bratta in particular, for their contributions toward the next edition of the NFPA publication, *Emergency Evacuation Planning Guide for People with Disabilities*.
- 4. Staff Remarks and Announcements.** Staff Liaison Kevin Carr gave a brief overview of the items on the agenda.
- 5. Approval of Minutes.** The minutes of the February 23, 2022 meeting were approved as written.

6. **NFPA DARAC Chair - Vice Chair Elections.** Jessica Hubert (Chair) and Marsha Mazz (Vice-Chair) were elected unanimously by the members present to these positions in accordance with the DARAC bylaws.
7. **Code Development Updates.** Updates were provided from DARAC members on NFPA and non-NFPA code development activities pertaining to disability concerns:
  1. ICC: A117.1
  2. RESNA: ED1
  3. ASME: A17.1
  4. NFPA: NFPA 70®, NFPA 72, NFPA 420 and NFPA 3000
  5. State of California: Accessibility updates
8. **NFPA Digital Platform Update.** Staff Liaison Kevin Carr provided an overview on social media/website/community portal/LiNK/NFPA outreach efforts.
9. **NFPA Standards Development.** Staff Liaison Kevin Carr provided updates on several NFPA documents, with the committee taking the following actions:

#### A. Public Inputs

- **NFPA 70®, National Electrical Code®.** No action taken as the document is just entering the next cycle. The committee will review any possible actions at the next meeting.
- **NFPA 101A, Alternative Approaches to Life Safety.** The committee reviewed the status of Public Inputs that were previously submitted. A task group (Windley-chair, Whalen) was formed to review items to present to the committee for Public Comment.
- **NFPA 130, Standard for Fixed Guideway Transit and Passenger Rail Systems.** The committee reviewed items for possible Public Input and will determine by ballot whether to supply Public Input.
- **NFPA 909, Code for the Protection of Cultural Resource Properties – Museums, Libraries and Places of Worship.** No action taken as the technical committee has not yet met to review the previously submitted Public Inputs from DARAC.

#### B. Public Comments.

- **NFPA 72®, National Fire Alarm and Signaling Code®.** The committee reviewed and discussed the previously submitted Public Inputs which were accepted by the respective NFPA 72 technical committees at their July 2022 meetings. The committee will review the technical committee ballot results and determine if Public Comment is needed at the next meeting.
  - **NFPA 3000®, Standard for an Active Shooter/Hostile Event Response (ASHER) Program.** The committee reviewed the status of Public Inputs that were previously submitted. A task group (Hubert-Chair, Burks, Whalen, Windley) was formed to review items to present to the committee for Public Comment.
10. **NFPA Fire Protection Research Foundation.** The committee had a general discussion on various topics. Staff Liaison Kevin Carr advised that proposals are due by the end of 2022.
  11. **NFPA DARAC Bylaws Discussion.** Staff Liaison Kevin Carr provided an update on the existing bylaws.

**12. Review of *Emergency Evacuation Planning Guide for People with Disabilities*.** Staff Liaison Kevin Carr provided an update on the status of this document, which is expected to be published and available by the end of 2022.

**13. DARAC Membership Discussion.** Staff Liaison Kevin Carr provided an update on the current composition of the committee and opportunities for future members and alternates.

**14. New Business.** The following items were discussed:

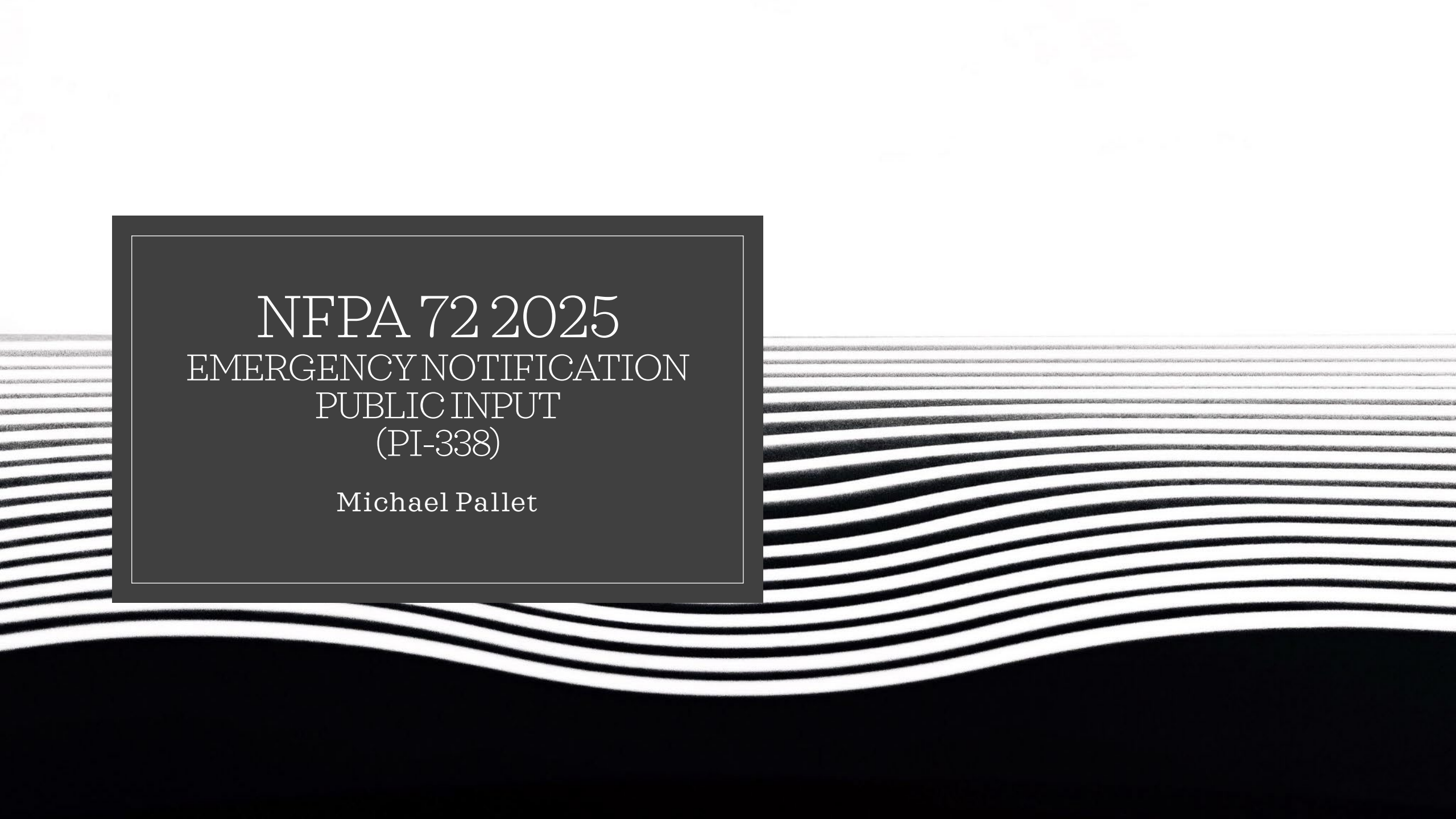
- a. The committee heard a presentation from Michael Pallett (attached).
- b. The committee discussed the topic of fire alarm notification for people with autism. Tom Norton to review this topic further and provide an update to the committee at the next meeting.

**15. Next Meeting.** The committee discussed having the next meeting in February/March 2023. Exact date to be determined.

**16. Adjournment.** The meeting was adjourned at 3:25 P.M. (EST)

Respectfully Submitted,

Kevin Carr, NFPA Staff Liaison



NFPA 72 2025  
EMERGENCY NOTIFICATION  
PUBLIC INPUT  
(PI-338)

Michael Pallet

# Michael Pallett

## 01

40 years of Communication System Design experience, including Director of Engineering for the design of Mass Notification and Nurse Call Equipment

## 02

Participated with the NFPA 72 Emergency Communication Systems Technical Committee for 2015, 2019, & 2022 Editions

## 03

Member of multiple UL Standards Technical Panels including Mass Notification (UL 2572), Nurse Call (UL1069), and Two-way Rescue Assistance (UL 2525)

# Why the interest in protecting the rights of communities of people with disabilities?

- As a father of a (now) 19 year old, non-speaking, autistic son, I have spent years working with him in many capacities to support him in his pursuits
- I have experienced both with him and some of his peers, the dysregulating effect that loud sounds and other stimuli have on his ability to manage his physical responses
- Anyone who has tried to work with a strong 180+ pound person who is in the midst of a “melt-down” or a “fight or flight” response might be able to appreciate the concern.

## 24.4\* In-Building Fire Emergency Voice/Alarm Communications Systems (EVACS)

### 24.4.8 Relocation and Partial Evacuation

#### **24.4.8.3**

Where the system is used to transmit relocation instructions or other fire emergency non-evacuation messages, a 1-second to 3-second alert tone followed by a message (or messages where multi-channel capability is used) shall be provided.

## 24.4\* In-Building Fire Emergency Voice/Alarm Communications Systems (EVACS)

### 24.4.8 Relocation and Partial Evacuation - 2019 Edition

#### **24.4.8.3.1**

The sequence [the alert tone followed by the message(s)] shall be repeated at least three times to inform and direct occupants in the signaling zone where the alarm initiation originated, as well as other signaling zones in accordance with the building fire safety plan.

#### **24.4.8.3.2 (24.4.8.3.3 in 2022)**

Approved alternative fire alarm notification schemes shall be permitted as long as the occupants are effectively notified and are provided instructions in a timely and safe manner in accordance with the emergency response plan.



## Public Input for 2022 Edition

Sagiv Weiss-Ishai

### **24.4.8.3.1\***

The sequence [the alert tone followed by the message(s)] shall be ~~repeated at least three times continuously repeated, until silenced or reset by emergency personnel,~~ to inform and direct occupants in the signaling zone where the alarm initiation originated, as well as other signaling zones in accordance with the building fire safety plan.

If a FIRE relocation message will only sound for three cycles and then automatically stop - this might create an unsafe condition.

Of course, that in some specific occupancies such as health care facilities or in occupancies housing people with special needs or in jurisdiction where response time is long, etc. - the relocation messages sequence could have different operation on a Case-by-case basis as a proposed approved alternative specified in 24.4.8.3.2. But the code should not be written for case-by case scenarios and for specific occupancies.

This code section should include the safest language as a default language for most buildings and occupancies and for FIRE related emergency pre-recorded relocation messages only and not for MNS or other Non-Fire emergency potential scenarios.

## 24.4\* In-Building Fire Emergency Voice/Alarm Communications Systems (EVACS)

### 24.4.8 Relocation and Partial Evacuation - 2022 Edition

#### Attempted Compromise

##### **24.4.8.3.1\*** (same as 2019)

The sequence [the alert tone followed by the message(s)] shall be repeated at least three times to inform and direct occupants in the signaling zone where the alarm initiation originated, as well as other signaling zones in accordance with the building fire safety plan.

##### **24.4.8.3.2\***

When the message is recorded, the repeated message sequence of 24.4.8.3.1 shall itself be repeated after **a pause of 180 seconds maximum**, or other time as established by the building safety fire plan and approved by the authority having jurisdiction, until automatically silenced or reset by emergency personnel.

## Public Input for 2025 Edition

Sagiv Weiss-Ishai

### 24.4.8.3.2\*

When the message is recorded, the repeated message sequence of 24.4.8.3.1 shall itself be repeated after a pause of 180 seconds ~~maximum, or other time as~~ maximum as established by the building safety fire plan and approved by the authority having jurisdiction, until ~~automatically~~ manually silenced or reset by emergency personnel.

The 180 seconds should be the MAXIMUM pause time permitted.  
It shouldn't be permitted to use other unlimited times longer than the Maximum 180 seconds. Any other approved pause time which is less than 180 Second is already covered by the current language of this section indicating 180 seconds Maximum and it is not necessary to indicate other time.

# Research behind 24.4.8.3 2022 edition

- NIST Technical Note 1779, *General Guidance on Emergency Communication Strategies for Buildings* (Kuligowski, 2013) Section 5.2.4.2 of
- Annex G – Guidelines for Emergency Communication Strategies for Buildings and Campuses
  - G.2.2.1(11)(d)] recommends emergency messaging repetition
    - It also recommends that **emergency messaging be repeated at intervals, rather than consecutively.**
    - “The second (or third message), provided some interval of time later, may catch a different population who were either busy or distracted during the time period when the first warning message was issued.”
- National Research Council of Canada, *Occupant Behaviour and Evacuation*,
  - “In public buildings, such as airport terminals or sport centres, occupant training is not practical; for these, much of the responsibility for safety will rest with staff.
    - In a particle sense, continuous messaging isn’t ideal for staff trying to assist the public, particularly for at risk communities such as autistics

# Additional Research

- National Council on Disability publication, *Effective Emergency Management: Making Improvements for Communities and People with Disabilities*
  - “People with disabilities should not be viewed as one more special interest group that drains resources from the common pool. Accommodating this large group often translates into being better equipped to serve all people. Anyone, at any moment, can incur a disability, particularly during emergencies.” (Kailes and Enders 2006, p. 13).
- Shields, Boyce, and Silcock (1997)
  - note that “staff trained in emergency evacuation should provide guidance to people who are evacuating public facilities.
- Morrow (1999, p. 5)
  - argues that a “sizable segment” of any community’s population will need additional assistance during evacuation

# Research Gap

- On the issue of how much time is optimal between successive message sequences, no independent research was found.
- Contacted Dr. Robert C. Chandler, Ph.D, previously at University of South Alabama, now a Principle at Crisis Masters
  - As someone familiar with this area of research, Dr. Chandler confirmed that research into the effects of emergency messaging on disabled communities did not exist but felt it would be an interesting area of study.
- SIG-ECS Technical Committee member Dr. Bryan Hoskin of Oklahoma State University
  - Also indicated interest in a research project of this question

Thank-you