Training for Effective National Weather Service (NWS) Communication in Chat and

Conference Calls

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ABSTRACT

Staff of the National Weather Service Offices should be able to understand interpersonal communication and public relations in order to better serve their mission to "protect lives and property" as well as work with their internal and external partners (NWS Internet Services Team). Two technologies have been developed to assist the integration of multiple external partners in one place at one time particularly National Weather Service (NWS) Chat and conference calls. This training is designed to address these technologies to hopefully inspire offices across the country to see the benefits of their proper usage. A needs assessment and inquiry to internal and external partners provoked demonstration of effective technological usage; information on the inquiries and a table (Table I) on the needs assessment can be found in this document. The initial training session showed improvements in the knowledge base by the trainees, and their scores on the skills of the trainer revealed this method and associated information to be appropriate. Two tables (Table II and Table III) in the document demonstrate these statistics. Supplemental documentation such as learning activities and PowerPoint presentations are provided in the Learning Activities section of this document. The intent of this training is not to criticize any current policies that are utilized by National Weather Service offices around the country but to offer alternative solutions for all external partners committed to serve and protect the public from weather hazards in one location at any given time.

Training for Effective National Weather Service (NWS) Communication in Chat and

Conference Calls

A federal agency responsible for effective communication and dissemination to the public of severe weather watches and warnings is the National Weather Service. In their efforts to provide such services, there are several internal and external partners to help the process. The staff of the National Weather Service Offices should be able to understand interpersonal communication and public relations in order to better serve their mission to "protect lives and property" as well as work with their partners (NWS Internet Services Team). Two technologies have been developed to assist the integration of multiple external partners in one place at one time. These two technologies are National Weather Service (NWS) Chat and conference calls. In an ever changing technological and scientific world, it is difficult for many staff members to utilize these forms of technology in an effective and efficient manner to maintain proper partnerships with other related agencies and fields. An assessment, general inquiry, and personal knowledge and communication have revealed the need for offices across the country that are not utilizing the technology to its capability and improve its effectiveness. This training is designed to address these technologies to hopefully inspire offices across the country to see the benefits of their proper usage.

The training is not intended to critique or criticize the individual office policies on these two forms of technology. It is designed to offer suggestions and show examples to present alternative approaches on their use. Supplemental documentation such as learning activities and PowerPoint presentations are provided in the Learning Activities

section of this document. These learning activities were created to encourage

exploration in public information, recognition of current office weaknesses, and potential

solutions to ongoing issues. The main emphasis of this training is to integrate the

concept of interpersonal communication with NWSChat and conference calls. Trainees

are expected to gain a better understanding of this topic and these technologies for

improvement in the interpersonal relationships of their workplace in and with the

National Weather Service to better serve and protect the public at large.

Task Analysis

Effective National Weather Service (NWS) Chat

National Weather Service (NWS) Chat is software used for telecommunication by

the National Weather Service Offices around the United States as a way to coordinate

and collaborate with various external and even internal partners in a quick format.

I. Define public information and its correlation to the National Weather Service

mission.

A. Differentiate proactive versus reactive public information.

1. Provide examples of proactive public information and media relations.

II. Analyze characteristics of interpersonal communication.

A. Explain efficient and effective communication in the workplace and its

application to internal and external partners.

B. Describe online support and relevance to NWSChat.

1. Specify the weaknesses in the current office policy/mentality towards

National Weather Service Chat as an office. Then share those ideas

with the group in the webinar by preparing a list of these weaknesses.

C. Outline the ideas behind effective teams in the workplace.

    1. Correlate the benefits of NWSChat to those of an effective work team.

        a. Communicate storm related information such as a brief discussion on the storm evolution to a number of partners/users.

        b. Provide thoughts towards re-issuance, cancellation, or expiration of watches and warnings especially to broadcast media preparing for a newscast.

        c. Receive real time storm reports from emergency managers, storm chasers/spotters, and the broadcast media.

        d. Clarify provided storm reports.

        e. Use the private chat feature to discuss specific issues, clarification, or have other discussions with one user to streamline the information provided through the main window for the office.

        f. Disseminate issued products in one location such as watches, advisories, warnings, public notification statements, and area forecast discussions.

    2. Explain the benefits to asking questions.

    3. Clarify the confirmation or lack thereof for storm reports.

    4. Develop a list of the broadcast media within your county warning area.

Communicating during Conference Call Conduction

Emergency managers work with numerous agencies to offer preparedness and safety information to a wide audience. Their main concern is the general public and

how to provide the most understandable and descriptive safety information before,

during, and after an event or disaster.

    I. Define public information and its correlation to the National Weather Service

mission.

      A. Differentiate proactive versus reactive public information.

        1. Discuss proactive and reactive public information in communicating with

        emergency managers.

   II. Analyze characteristics of interpersonal communication.

      A. Diagnose the important element to communication by catering to the

        specific needs of the audience.

      B. Explain efficient and effective communication in the workplace and its

        application to internal and external partners.

      C. Outline the ideas behind effective teams in the workplace.

        1. Discuss the current office policy for conducting conference calls.

        2. Determine any weaknesses within the current policy.

   III. Clarify the benefits of conference calls.

      A. Report the results of the needs/wants of emergency managers in a

        conference call.

        1. Assess the appropriate time for calls to be conducted.

        2. Describe the desired contents of the conference call.

   IV. Outline a proper conference call for emergency managers and other

influential partners.

      A. Discuss the basic concepts behind a conference call.

B. Clarify the purpose of visual aids to be used.

C. Organize an email account of emergency managers and other important

partners for conference calls. Divide the group as needed into sub-

groups such as per location to ensure adequate access to any proposed

conference call.

Annotated Bibliography

Aitken, Joan. (Undated). *13 – Interpersonal Communication in the Workplace*

[PowerPoint slides]. Retrieved from: http://onlineacademics.org/CA104/Lectures/.

This PowerPoint presentation was utilized in an undergraduate course provided

by the author. Since the topic of this core assessment involves interpersonal

communication in a workplace, it was fitting to integrate some the relevant information

into the session. A main topic from this source was the effectiveness of teams which

are correlated to the use of NWSChat and conference calls with various external

partners working together to form a unified team to serve the public.

Berger, Charles R. (2002). Goals and Knowledge Structures in Social Interaction. In

Mark L. Knapp and John A. Daly (Eds.), *Handbook of Interpersonal Communication*

(181-212). Thousand Oaks, CA: Sage Publications, Inc.

Interpersonal communication is one of the topics represented in both training

sessions. Thus this book was sought for its perspective on interpersonal

communication in order to gain a better understanding of this subject matter. The

editors comprised chapters written by several scholars within the field of

communications including the author of this chapter. These chapters cover various

aspects related to interpersonal communication and served as informative resource.

Social interaction considers five types of knowledge to have an effective interaction (Berger, 2002). The emphasis of this training is discussing how to use the technologies to effectively communicate with external partners. Therefore this specific chapter provided information that could be used in both sessions.

Brundage, Richard W. (Undated). *Hi-Touch Communications In a Hi-Tech Era*. Overland Park, KS: Center for Advanced Media Studies.

The technologies presented in the training session could be considered more advanced than the basic technologies previously utilized. In this source, there is information regarding communicating in a new technology age such as how to effectively conduct a news conference. This information was helpful and applied to conference calls which are a relatively similar concept. Author has his own company devoted to training and studying the use of media based on his several years of experience in this industry.

Burleson, Brant R. and Erina L. MacGeorge. (2002). Supportive Communication. In Mark L. Knapp and John A. Daly (Eds.), *Handbook of Interpersonal Communication* (374-424). Thousand Oaks, CA: Sage Publications, Inc.

Interpersonal communication is one of the topics represented in both training sessions. Thus this book was sought for its perspective on interpersonal communication in order to gain a better understanding of this subject matter. The editors comprised chapters written by several scholars within the field of communications including the author of this chapter. These chapters cover various aspects related to interpersonal communication and served as informative resource. In the training sessions, there is an emphasis on how the external and internal partners of

the staff at the National Weather Service can support one another using the two

technologies presented. Each technology provides the staff an opportunity to show

support to one or more of its partners; the trainees have to be able to understand how

this can be done. This specific chapter offers information on completing this task.

Center for Advanced Media Studies. (1997). Mastering TV Appearances: The 5 Star

Survival Guide for Effective TV Interview. *Mastering the Media – 5 Video based Public*

Relations Course.

     While the emphasis of this material may appear to be outside of the content

matter for the project, the basic interviewing skills particularly with the media was

applicable for use in National Weather Service Chat and for conference calls or other

interactions with emergency managers and other partners. This information offers steps

for preparing for an interview and comes from a credible source. There are instructional

videos/DVDs as well as a guide booklet to further enhance the message and training of

the subject matter. The interaction with the media is used in NWSChat thus the ideas

presented about what to consider in these types of interactions were added to the

training session; an associated understanding helps in the attempt to try to serve the

needs of this external partner to hopefully build a stronger relationship between the

parties.

Emergency Management Institute. (August 1996). *Basic Emergency Public Information*

Course Student Manual SM290. Emmitsburg, Maryland. As provided by Kansas

Emergency Management on December 9-10, 2002.

     This guide was used for a course to train emergency managers and associated

fields on how to communicate with the public. The basic guideline is based off of

information provided by the Federal Emergency Management Agency and the

Emergency Management Institute who specialize in providing emergency related

planning and preparedness information to officials and the public. In this guide, there is

general instruction on news interviews and conferences, characteristics for a public

information officer, and the different forms of media. Additionally the guide offers

activities to apply what was taught in the lessons. This guide offered insight into the

subject matter as well as presented ideas on constructing activities for the trainees to

apply the provided information. The source integrates many of the external partners for

the National Weather Service and their respective needs in its content.

Guilar, Joshua D. (2001). *The Interpersonal Communication Skills Workshop: A*

Trainer's Guide. New York, NY: AMACOM.

In this book, the author who "teaches Communication at Suffolk University"

provides a basic layout and content for trainers preparing training sessions associated

with interpersonal communication skills. The book provides a guide of what to consider

when putting together a session, how to assess the trainees, and manage the project.

"This book is a trainer's guide for the preparation, delivery, and evaluation of a

workshop in interpersonal communication. The guide is a road map with resources for

you to deliver world-class training." There are examples of overheads and sample

activities that can be integrated into training as well as a complete time breakdown for

each module and learning activity. Additionally there are pre and post behavioral

assessments for the trainees offered after the proposed modules. Mainly this book was

used for some of the basic information on interpersonal communication and how to

create a PowerPoint presentation from the material based on the suggested overheads.

A couple of the learning activities were adapted to the content of this project as well.

Jacobs, Scott. (2002). Language and Interpersonal Communication. In Mark L. Knapp

and John A. Daly (Eds.), *Handbook of Interpersonal Communication* (213-239).

Thousand Oaks, CA: Sage Publications, Inc.

Interpersonal communication is one of the topics represented in both training

sessions. Thus this book was sought for its perspective on interpersonal

communication in order to gain a better understanding of this subject matter. The

editors comprised chapters written by several scholars within the field of

communications including the author of this chapter. These chapters cover various

aspects related to interpersonal communication and served as informative resource. A

main idea taken from this chapter was the expression of an idea by an individual and its

impact. In the training session on conference calls, it is important for the trainees to

understand how to express their ideas to reach their audience and their specific needs.

National Oceanic and Atmospheric Administration. (Undated). Weather-Ready Nation:

About. Retrieved June 24, 2012, from

http://www.nws.noaa.gov/com/weatherreadynation/about.html.

The purpose of this link was to offer perspective onto the Weather-Ready Nation

initiative used by the National Weather Service. This link provides insight into the main

idea behind this initiative which is a direct tie to the integration of multiple partners to

serve the public at large. Both technologies discussed in the training session are

representative of ways the NWS is addressing the purpose of Weather-Ready Nation;

they also represent sources that can be improved upon to better serve and meet the requirements of the initiative which is further justification for the training sessions.

NWS Internet Services Team. (2011). National Weather Service Mission Statement. Retrieved June 24, 2012, from http://www.weather.gov/mission.php.

Since the training is designed to initially reach the staff at National Weather Service offices across the country, the mission of this organization should be understood. The NWS Internet Services Team has the responsibility to maintain the website, but it is the organization itself that designed the mission in coordination with the federal government who is its parent agency. Therefore this resource was beneficial to serve as a reminder to the trainees of the overall purpose of the organization and showed the similarities to the missions of their external partners.

Sias, Patricia M., Kathleen J. Krone, and Fredric M. Jablin. (2002). An Ecological Systems Perspective on Workplace Relationships. In Mark L. Knapp and John A. Daly (Eds.), *Handbook of Interpersonal Communication* (615-642). Thousand Oaks, CA: Sage Publications, Inc.

Interpersonal communication is one of the topics represented in both training sessions. Thus this book was sought for its perspective on interpersonal communication in order to gain a better understanding of this subject matter. The editors comprised chapters written by several scholars within the field of communications including the author of this chapter. These chapters cover various aspects related to interpersonal communication and served as informative resource. This project focuses on training sessions for a designated work environment, the National Weather Service. In this chapter, the authors present information on

workplace relationships and effective communication in the workplace which are undoubtedly beneficial ideas for this training.

Stewart, John (Ed.). (1995). *Bridges Not Walls: A Book about Interpersonal Communication* (6th ed.). United States: McGraw-Hill, Inc.

The author of this book taught interpersonal communication at the University of Washington for three decades. His experience on the subject matter aided the choice to use this source. In this book, the purpose is for effective communication techniques and interactions for its readers. Both technologies of this project are forms of communication that may not be currently utilized to the best of their ability. There are a few points that gave insight on techniques and ideas on improvement strategies for communication skills; these points are easily relatable to both technologies of the training sessions.

Walther, Joseph B. and Malcolm R. Parks. (2002). Cues Filtered Out, Cues Filtered In: Computer-Mediated Communication and Relationships. In Mark L. Knapp and John A. Daly (Eds.), *Handbook of Interpersonal Communication* (529-563). Thousand Oaks, CA: Sage Publications, Inc.

Interpersonal communication is one of the topics represented in both training sessions. Thus this book was sought for its perspective on interpersonal communication in order to gain a better understanding of this subject matter. The editors comprised chapters written by several scholars within the field of communications including the author of this chapter. These chapters cover various aspects related to interpersonal communication and served as informative resource. Communication can be greatly influenced by the media in which it is presented. A

message may be more effective when it is communicated in one medium over another (Walther and Parks, 2002). The training session on NWSChat and discussion on the benefits of using this technology are directly related to the concepts in this chapter. Therefore this chapter is a good source of information on computer related communication which is one of the technologies for the project.

Needs Assessment

This project is designed on investigating their use of National Weather Service Chat and conference calls with external partners such as broadcast media and emergency managers. The questions of the needs assessment are designed to determine their public relation skills through relaying information from the local offices to external partners who will then relay it to the public. In the National Weather Service, staff members are committed to providing products and services for the protection of life and property which is part of its organizational mission (NWS Internet Services Team, 2011). As part of this commitment, there have been developments in technology to better assist the process like the methods mentioned above.

Recent tornado outbreaks and other natural disasters have prompted an initiative to further the efforts to form a Weather Ready Nation in 2011. This initiative is meant for the 124 National Weather Service Offices in the National Oceanic and Atmospheric Administration across the country to coordinate and collaborate with external partners and one another to promote preparedness and safety to the public for more resilient communities (National Oceanic and Atmospheric Administration, Undated). Therefore the organization is amplifying their attempts to work with external partners to form a team committed to serving the public. National Weather Service Chat has been a

program that has grown in popularity in the past few years as a way to ease communication between offices and their external partners. Chat is not utilized across the country at each office in the same manner. The effectiveness of this program could be improved upon with more offices understanding the benefits to its proper use. Thus the questions are posed in the pre-test to determine if there is an understanding of how to improve interpersonal skills and public relations with NWSChat. Conference calls are another way to inform the external partners of potential threats to their designated areas. These calls are a proactive form of public information, since they are held the day of or prior to the potential impact of natural threat. Both methods of communication are ways to reach and serve the public; however, it is important that they are understood and used properly for overall effectiveness of serving the mission.

Pre-test

1) Explain the difference between proactive and reactive public information.

2) Provide the most important element to think about when communicating with external partners.

3) List three benefits of using National Weather Service Chat in operations.

4) If you were in a severe weather situation, could you communicate with multiple partners using two different methods?

Results

These questions were asked to employees at multiple National Weather Service (NWS) offices to assess their interpersonal communication skills through various methods.

Table I.

Question/ Answer	#1 Correct	#1 Incorrect	#2 Correct	#2 Incorrect	#3 Yes	#3 No	#4 Yes	#4 No
Response	5	3	5	3	8	0	8	0

While the results are indicative of correct responses to this part of the assessment that would indicate there would be no reason to develop training on such topics with their demonstrated knowledge base, it is in no way an adequate representation of all the offices as a whole. These responses are an indication that my current office has a good understanding of the concepts to be presented in the training. Thus the trainer can apply the principles and approach that is utilized towards interpersonal communication and public relations within my office as an aid for training development.   Additionally the trainer can tap into the subject matter experts within my office for their advice, thoughts, and recommendations for this training process.

The individuals from other offices responded correctly to three out of the four questions and struggled on the first one indicating a need to address proactive and reactive public information for the training for other offices. Since the pre-test revealed this topic to be misunderstood, the topic could be covered in both training sessions. Even though the three remaining questions were answered correctly by the five respondents to the survey, training sessions can still be considered beneficial. There are over 120 offices in the National Weather Service who have a routine operation staff of roughly 15. Therefore the number of polled individuals is not a fair sample size. Also the individuals who responded to the pre-test use the technology covered in the training

session; each has stated there are issues with other staff members at their respective offices using the technologies to be discussed.

In the training session itself, the trainees who were of the same office as the trainee did indicate their lack of knowledge on public information and interpersonal communication. There was success in their ability to recognize the benefits of NWSChat and other technologies and their usage. The incorrect responses are indicative that the trainees struggled with the concepts of interpersonal communication but may be able to apply some of the ideas into their use of the technologies. It was justified to continue the training session based on these results even if they were unknown until after its completion, but they were helpful in assessing its success which will be discussed later on. Justification still exists to utilize the philosophy of the National Weather Service in Wichita as a guide for the application of these technologies.

Since these training sessions are designed to reach a wide audience of NWS offices across the country, further queries needed to be performed in order to properly assess the needs of the agency. Two queries were posed to try to gauge an internal management and external partner perspective on NWSChat and conference calls respectively. One questionnaire was a series of eleven questions for Warning Coordination Meteorologists within central region to understand how their individual offices utilize NWSChat and the involvement of the external partners using this technology. The other poll was provided to emergency managers across the state of Kansas. These polls were used to explore in greater depth the results indicated by the provided pre-tests and are discussed in detail below.

Query to Warning Coordination Meteorologists about NWSChat.

1) Does your office utilize NWSChat?

2) If so when do most people use chat?

   - daily

   - weekly

   - as needed

   - severe weather operations only

   - never

3) Does your office monitor or actively participate in chat?

   - monitor only to see if there are issues or reports

   - monitor and answer questions

   - monitor, answer questions, and provide additional information

4) Do individuals in your office provide information on storm evolution or a mesoscale discussion in chat?

5) Is cancellation/expiration/new warning information provided by your office through NWSChat?

   a) If so, is this information proactive or reactive?

6) Do the media and emergency managers within your county warning area participate in chat?

7) Has NWSChat been explained to your external partners such as providing briefing tutorials?

8) Are storm reports provided to your office via NWSChat?

9) What is the overall mentality or feeling towards NWSChat by your office?

10) Do you think if training was provided to employees that this may help any current reluctant feelings?

11) Are multiple chat rooms for your office utilized to separate external partners?

The above list of questions was sent to Warning Coordination Meteorologists in central region forecast offices who are in charge of integrating NWSChat into forecast operations. Mainly this query was designed to determine the needs of the forecast operational staff and the current usage of this technology. There was not necessarily a right or wrong answer to any of the questions provided above because it is an individualistic office preference on how to handle it. Results did indicate that many offices had a lack of emergency managers participating in NWSChat. Reasoning behind the smaller number of emergency managers participating could be related to minimal training on the technology and lack of understanding of the benefits of it. Therefore the thought is to modify the training for the NWS offices to be able to provide it to their emergency managers in hopes of encouraging them to more actively use chat.

Another notable idea that came from the results of the query was the limited number of reports from various external partners provided via NWSChat. This lack of reports could correlate to the active participants in chat both internally and externally. If a bulk of the storm reports for an office comes from emergency managers, then this may relate to the number of them in NWSChat. There could be minimal interaction between the partners for several reasons. One possible explanation is the lack of training available to demonstrate its benefits as mentioned above. Modifications to the current training for the National Weather Service may extend beyond the emergency managers and could include but not limited to the broadcast media and dispatch

centers. These results are indicative that training on NWSChat may be a beneficial tool to potentially improve the relationships with external partners and better serve the mission of the agency.

Poll to emergency managers on conference calls.

1) When would you like to have a conference call with the National Weather Service?

2) What information should be included in on the call?

3) List the positives of conference calls in the way they are currently provided.

4) List the negatives of conference calls in the way they are currently provided.

5) Provide any additional suggestions or concerns regarding conference calls provided by the National Weather Service.

Selected emergency managers were chosen across the state of Kansas to provide feedback on the current conference calls conducted by the National Weather Service. The eleven selected were based on the size of the county/population served and their interaction with multiple NWS offices. Once again the results of this poll were not designed to be right or wrong but simply a perspective into the way things are conducted currently. This poll was intended to potentially offer guidance on current shortfalls found in conference calls which would then be covered in that respective training presentation. Overall the level of satisfaction to conference calls by the NWS was favorable. There was minimal dissatisfaction even from emergency managers who hear calls from different NWS offices with varying policies to conduct a call. The emergency managers did offer insight into when they would like calls, what they would like to hear, and suggested improvements. This information aided in the development

of the training session on conference calls, and their ideas were directly input into the

PowerPoint presentation to share their thoughts with others. Each emergency

manager's desire for conference calls and their individual needs are going to change

within a county warning or coverage area for an office. National Weather Service

offices are going to need to develop their own philosophy and associated policies to

meet those needs, but this training session can be a guide for offices that may be

uncertain of how and when to conduct these calls. They may be able to take away the

importance of developing their relationships with their external partners or a more

efficient way to organize their list of potential attendees for the calls for guaranteed

access.

Behavioral Objectives

At the end of the training session, each trainee will be able to:

    a) Explain the difference between proactive and reactive public information. The

        trainees will be able to understand these terms in association with the

        technology of National Weather Service Chat.

    b) Determine what the most important idea behind communication is when

        communicating with external partners.

    c) Suggest three benefits of using National Weather Service Chat.

    d) Outline the five steps to conduct a conference call for emergency managers.

Assessment to Measure Objectives

    1) Differentiate between proactive and reactive public information by defining the

terms and correlate each to National Weather Service Chat by offering examples.

2) True/False The idea that is most important to consider in communication with external partners is their individual needs or concerns.

3) List three benefits to the utilization of National Weather Service Chat.

4) Which of the following correctly identifies the five step process for conducting a conference call with emergency managers?

a) Decide to conduct a call, notify intended email group, coordinate with neighboring offices on a time, prepare introduction/body/conclusion, hold call

b) Coordinate with neighboring offices on a time, decide to conduct a call, notify intended email group, prepare introduction/body/conclusion, hold call

c) Decide to conduct a call, coordinate with neighboring offices on a time, prepare introduction/body/conclusion, notify intended email group, hold call

d) Decide to conduct a call, coordinate with neighboring offices on a time, notify intended email group, prepare introduction/body/conclusion, hold call

Results

Table II.

Question/ Answer	#1 Correct	#1 Incorrect	#2 Correct	#2 Incorrect	#3 Correct	#3 Incorrect	#4 Correct	#4 Incorrect
Response	3	0	3	0	3	0	3	0

The results of the post assessment can be found in Table II and are indicative that the trainees all correctly responded to all of the questions which are alternative forms of the pre assessments provided to them. While the trainees for the training sessions were co-workers in my office who already have a good grasp on the technologies. It was their ability to embrace the concepts of interpersonal communication and integrate them into these technologies that bettered their scores. This leads me to believe that the trainees did gain something from the session even if much of it was common knowledge for them. There was some level of influence on the behalf of the trainer to their learning process and knowledge on interpersonal communication. Since the training session is designed around the way things are done at the office including the learning activities, it was hard for the trainees to personalize the information which may have influenced their scores for the trainer and will be discussed below.

One thing was conveyed by the trainer was to make sure to explain the design of the presentation even if my trainees were not necessarily the intended audience. An explanation was provided on how things were going to be done for the webinar/teletraining session. The trainees were encouraged to offer feedback as well as try to put themselves in the shoes of other individuals who may be unfamiliar with the topics and their own initial hesitations to the application of such technologies in their workplace environment. Also there was consideration for the needs of the audience by the trainer in trying to rush through the presentation for their personal time commitments and conflicts. It would have been idealistic to offer the training sessions to different groups; however, this was not feasible due to schedule conflicts and other time

constraints. Therefore the training session had to be provided to a small group of co-workers which did include a local subject matter expert.

The few trainees that were able to attend did say that the training was good. Their scores on the trainer's performance using Figure 11.5 on pg. 264 of the textbook by Beebe, Mottet, and Roach from 2013 averaged 4.66 out of 5. This score is relatively fair and high based on the trainer's performance. Table III depicts the responses of the trainees and their respective level of agreement from the assessment of the trainer's skills. One question that did score low on two of the trainees' sheets regarding trainer performance was the connection and integration of their life experiences into the training program. The lack of personalization could stem from their current knowledge of the technologies. This also led to a lower score on recommending the training to other co-workers which is acceptable. However, the other questions about the ability as a trainer were mostly 5s. The confidence by co-workers in the trainer's ability to train and teach others was greatly appreciated. Since the basis of this training is the current model of our office, it was still good to get their feedback on how the information was presented and to figure out what modifications could be made to improve its effectiveness.

This presentation was slightly influenced by the needs of the audience for it to be rushed and fit into a small time window. The trainer had to hurriedly get through the information which made the content appear rushed, but this would likely change in the actual deliverance of the training session to the intended wider audience. There is recognition by the trainer in talking more rapidly when giving presentations; thus there an acceptance and conscientious attempt to think about it in the future to slow down.

There is just a level of excitement and passion for what is being discussed which makes

the speech at a faster rate. An attempt was made to connect to the audience and

integrate them into the training process by encouraging feedback and using situations

locally to personally involve them. Obviously improvements can always be made, and

these are known for next time. One suggestion by a trainee was to add examples to the

PowerPoint presentation which was promptly done to show even further evidence of the

benefits of using these two forms of technology. Also the PowerPoint for conference

calls had two slides that were swapped for smoother flow which was another suggestion

by the trainees during the training session.

Table III.

Level of Agreement	SD	D	U	A	SA
Questions					
Organized	0	0	0	0	3
Clear and accurate	0	0	0	1	2
Expressive and energetic	0	0	0	1	2
Answer satisfactorily	0	0	0	1	2
Life experiences	0	0	0	2	1
Recommend training	0	0	0	2	1
Recommend trainer	0	0	0	0	3
Totals	0	0	0	7	14
Average	0	0	0	1	2

Learning Activities

National Weather Service NWSChat Training Session

In this session, a variety of activities will be integrated into the training session in order to demonstrate this type of communication as well as ways to improve their communication with their external partners. One of the proposed activities to be used for this training session is a series of activities for the group to discuss in their respective offices. They will share their generated thoughts in their individual office setting with the group on the webinar. Another activity will be four example situations that have been created to describe the benefits of NWSChat with those respective scenarios. Visual aids such as example dialog between various offices around the country and a PowerPoint presentation will be used. The example dialog was provided by three offices and was used during severe weather events. PowerPoint will describe the basics of communication and how to improve interpersonal communication skills.

Activities. The first activity listed below will be used near the start of the presentation as an ice breaker as well as provide the trainer with an understanding of the trainee's individualistic perception on what needs to be discussed during the training session beyond the revelations of the needs assessment.

a) Provide examples of proactive public information and media relations.

b) Specify the weaknesses in the current office policy/mentality towards National Weather Service Chat as an office. Then share those ideas with the group in the webinar by preparing a list of these weaknesses.

c) Develop a list of the broadcast media within your county warning area.

Example situations. Four realistic example situations will be provided to demonstrate the benefits of using National Weather Service Chat in that respective situation. Trainees will offer their input on the situation and their approach to handle the situation. These situations will be spread throughout the training session and intermixed with the instructional material. The four create example situations are provided below with the respective benefit of chat.

Situation #1: Sirens did not sound in a community as a damaging tornado ripped through the downtown area. This tornado caused major damage to several buildings. Residents were upset about the failure of the sirens and blamed the NWS.

Benefit: We will not necessarily be able to change their opinion; however, emergency managers can and have in NWSChat tell when and where they are sounding the sirens. They can also report when they are not working for a community. The integration of different partners with NWSChat allows the information to be communicated between parties. Media can inform residents that the sirens are out of commission which was part of the chat dialogue. We are a team with our external partners who are trying to communicate a consistent message for public safety.

Situation #2: Severe weather is occurring all over your county warning area. There are severe thunderstorm warnings out as well as a tornado watch. A local TV weatherman gets confused and mixes up things. In this situation, he went on air with a tornado warning instead of a severe thunderstorm warning. Approximately 15 minutes into his supposed conveyed warning, radar indicates a tornado warning is warranted. Thus the warning operator issues one, and a tornado is reported three minutes later. This weatherman gets praised for "beating" the NWS.

Benefit: Situational awareness displays in offices allow NWS to ensure product dissemination as well as accuracy of information. If there is an error or issue with the information being presented, NWSChat can serve as a way to address these issues. This can be done through private chat with the media partner representative for the station if they are in the chat room. Thus it is advantageous to try to promote this idea to them. Plus NWSChat allows for real time flow of information for all parties involved.

Situation #3: A tornado tore through an urban community and caused major damage including destruction to a school building which resulted in many injuries. There was apparently an argued lack of preparedness in the reports after the event. Questions arise about the short lead time on the warning.

Benefit: While there is no way to ensure an adequate lead time for every situation or even that the individuals will receive it, NWSChat can help in this situation. Watch/warning issuance/cancellation/expiration can all be found in NWSChat with the nwsbot. It is approvable to discuss what is being done by the NWS within a five minute window of doing so. This can be extremely beneficial near the news times for the broadcast media. NWS can also convey they are talking to SPC to get rid of the watch or are going to wait for the next volume scan or two of the radar, etc. Additionally even though we put out a warning with the best intention, errors do occur. NWSChat allows the office to communicate with users which helps with quality control. This way everyone can be on the same page at one time without having to tie up phone lines to/from each partner.

Situation #4: A community is struck by a tornado and a few thunderstorms. This tornado left 4 dead and 23 injured. The warning was out 15 minutes before the tornado

struck the town. Sirens did not sound, and a dispatcher called a television station when they spotted the tornado on the outskirts of the town. The NWS office was backed up with phone calls as was dispatch. Thus the report of the tornado was never received until it already caused a grocery store roof to collapse.

Benefit: NWSChat offers the opportunity for not only the media but dispatch to relay reports to the NWS. These reports can be provided to the key partners responsible for relaying information onto the public. NWS may alter warnings to reflect the reports such as increasing the mentioned hail size or wind speed which may cause the media and other partners to change their presentation of the information. One philosophy we use at ICT is the severity of an event can correlate to the amount of clothing the broadcast media is wearing. The more severe an event means the higher likelihood for their sport coats and ties to be off. Their sleeves may be rolled up too.

In NWSChat, it is possible to receive LSRs in real-time rather than waiting for them to be sent by the NWS office. The media can see the report and relay the information accordingly if the NWS is back logged in reports. Another idea is to use the words confirmed/unconfirmed with the storm reports. This is mainly to be used by the media and emergency managers obviously, but it can be a beneficial tool when determining whether or not the report is believable before proceeding in methods for verification. It may also prompt NWS employees to seek further information on this report in the main chat window, private chat, or phone call.

Visual aids. Three different examples provided by three NWS offices will be shown the group to demonstrate three different severe weather events when chat was successfully utilized for communication between various external partners and aided to the

performance by the office (Edwards, Tony, personal communication, July 3, 2012)

(Gust, Greg, personal communication, June 27, 2012) (Omitt, Chad, personal

communication, June 28, 2012). Since the training will be given via webinar, a

PowerPoint presentation was chosen to provide the information for its easy to use and

view format. A slide for each learning activity was designed to be a place holder during

the presentation. The situations and respective benefits discussed above will be

brought into the slides and is indicated in the notes. All of the PowerPoint slides can be

found below in their numerological order.

Outline

- Public information
- Interpersonal communication with external partners
- Effective teams
- Benefits of NWS Chat
- Significant event examples

2

Public Information

- Purpose: Convey info that "saves lives, protects property, and minimizes negative impact on environment" (Emergency Management Institute, 1996)

3

Proactive versus Reactive Public Info

Proactive

- Reaching out to external partners
- Anticipate impactful hazards
- Plan to meet public needs
- Provide "timely and accurate" information (Emergency Management Institute, 1996)

Reactive

- Lack of preparation
- "Insensitive" to "needs, interests, or concerns" of public (Emergency Management Institute, 1996)
- Uncertainty in public trust

4

Provide examples of proactive public information and media relations.

Learning Activity

5

Interpersonal Communication

- Depends on quality of contact
- Involves understanding one's responsibility

6

Efficient and Effective Communication

- "As common ground accumulates, communication becomes both more accurate and more efficient" (Berger, 2002).
- "Combinations of media" can increase communicative efficiency (Walther and Parks, 2002).
- Perceived support
- Workplace relationships

7

NWS Chat

🐧 Pidgin   ✕

Enter password for em-
john.doe@nwschat.weather.gov/Home (XMPP)

Enter Password: ••••••••••••

☐ Save password

Cancel   OK

8

Online Support – NWS Chat

- Online support = opportunistic support relationships
- Available support

Broadcast Media

NWS

Emergency Management

Storm Spotters/ Chasers

Law Enforcement/ Fire/Dispatch

9

Specify the weaknesses in the current office policy/mentality towards National Weather Service Chat as an office.

Learning Activity

10

Effective Teams in the Workplace

- Clear goal and member roles defined
- Members use skills to help performance
- "Commitment to the team and success" (Aitken, Undated)
- "Collaborative climate" (Aitken, Undated)
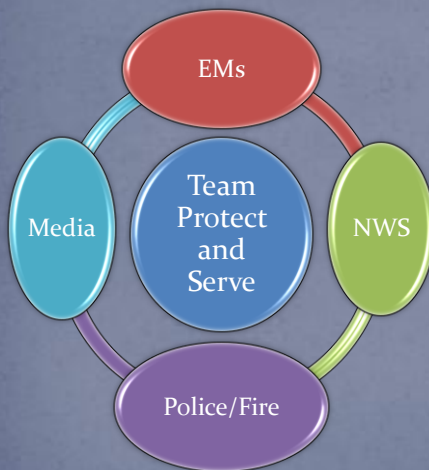- Integrated feedback regarding performance

11

"Workplace relationships function as information-sharing, decision-making, influence-sharing, and instrumental and emotional support systems"

(Sias et. al, 2002).

12

Benefits of NWS Chat for effective team

EMs

Media

Team Protect and Serve

NWS

Police/Fire

- Receive and clarify storm reports from multiple sources
- Open communication
- Provide background to warnings and storm cycle
- Verification in dissemination

13

NWS Chat Event Example - Service

- (19:14) <em> Do you guys have an expected initiation time and location for the storms this afternoon?

- (19:17) <nws> Best estimate is along the sfc front/sfc focus which should be along an abilene to marysville line? between 3 and 6...the uncertainty remains the strength of the capping inversion which should gradually weaken through 6pm.

(Omitt, Chad, personal communication, June 28, 2012)

14

NWS Chat Event Example - Reports

- (21:46:08) <nwsbot>: FGF continues Tornado Warning for... Otter Tail, Wadena [MN] till 5:15 PM CDT ...AT 443 PM CDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A SEVERE THUNDERSTORM CAPABLE OF PRODUCING A TORNADO 5 MILES SOUTH OF TWO INLETS...OR 30 MILES NORTHEAST OF DETROIT LAKES...MOVING TO THE NORTH AT 45 MPH.

- (21:48:19) <Wadena-Mn-EM>: Heavy rains, moderate winds west of Wadena N-NE direction. Unconfirmed tornado touchdowns reported just into Otter-tail County.

- (21:48:54) <Wadena-Mn-EM>: Menahga - Sirens activated via Law Enforcement for precaution.

- (21:49:33) <nws>: fgf...just got a report from a chaser in Ottertail north of wrightstown and west of hewitt on 201. sees a funnel close to ground but does not appear to be rotating quickly.

(Gust, Greg, personal communication, June 27, 2012)

15

NWS Chat Event Example – Storm Damage

- 00:54 < em > After searching the north/east part of Rice county we have no injuries and only a few house's with damage several powerlines and poles down
- 02:54 < em > From Sedg. Co. 9-1-1: we received a call from a resident at 1363 W. 40th Street in Sumner County. She advised her house was hit by the tornado and destroyed. Our 9-1-1 notified the 9-1-1 in Sumner County, and presubably emergency equipment is en route to provide assistance. NOT CONFIRMED
- 02:56 < em > Another report of tornado damage in the 1300 block ofwest 40th Avenue...no injuries reported...

(Hayes, Chance, personal communication, June 25, 2012)

16

NWS Chat Event Example - Proactive

- 05:50 < media > It's going to be a busy day
- 06:05 <academia> Five-minute data collection for Kentucky Mesonet data has been turned on in light of today's severe weather threat.

(Edwards, Tony, personal communication, July 3, 2012)

17

NWS Chat Event Example - Flooding

- 01:55 < Ham Radio > - Several people trapped by flood waters at Brown Branch in Johnson Co.
- 02:01 < Ham Radio > - Car stuck in floodwaters on Mill Creek 4.5 miles south of Fort Gay in Wayne Co, WV
- 02:13 < Ham Radio > - Creek out of banks along Rt 2020 in Magoffin County but is not in the roadway.

(Edwards, Tony, personal communication, July 3, 2012)

18

Benefits to asking questions

- "Reducing uncertainty" (Guilar, 2001)
- Mutual connection
- Clarify perceptions and overcome associated issues or misunderstandings

19

Hints for asking/responding to questions

- Avoid argumentative questions
- Avoid put downs
- Appreciate answers
- Listen to the other's concerns

20

media

nws

NWS Chat Event Example – Interpersonal

- 21:09 <media> Sorry to be a pain, but I now have THREE warnings for Geary Co. Any way things can be cleaned up when you folks get the chance?
- 21:09 < media > agreed
- 21:09 < media > thanks KSN
- 21:10 <nws> We'll be letting those first two go in the next few mins. Sorry for any confusion...main point is 70+ winds headed toward MHK right now.
- 21:13 < media > 10-4...Just makes the ticker at the bottom of the screen confusing for folks when Geary pops up so many times, with different exp times.

(Omitt, Chat, personal communication, June 28, 2012)

22

NWS Chat Event Example - Clarification

- 22:31 < media > The AP is reporting a 93mph gust out of Manhattan? Is that correct???
- 22:33 < nws > 81kts at the MHK tower measured earlier at 60ft up.
- 22:33 < media > What time was that?
- 22:34 < nws > 423pm...report should be up above
- 22:34 < media > Sorry, I missed that somehow. Thanks!

(Omitt, Chat, personal communication, June 28, 2012)

23

Confirmed vs Unconfirmed Reports

- Clarify source
  - Pose questions instead of judgment
- Determine level of confidence
- Suggest reliability
- Educate partners on report confirmation

24

Confirmed vs Unconfirmed Example

- (14:29) <media> I have a viewer report of tree limbs down (unknown size) in Rockcastle County.
- (14:30) <media> I believe he is in the very southern part of the county... a little skeptical that they would be of any size, given the fact that the far more intense part of the storm is still well south.
- (14:30)<media> (Translation: I question the credibilty.)\
- (14:31) <nws> Okay, Thanks, we will call the EM and see what went on.

(Edwards, Tony, personal communication, July 3, 2012)

25

Develop a list of the broadcast media within your county warning area.

Learning Activity

26

NWS Chat Event Example - Appreciation

- (00:14:12) <media>: I agree with Xxxx. I really appreciate the instant spotter reports so I know which tornado warnings I should concentrate on when going on air. Thanks for getting them out so fast.

(Gust, Greg, personal communication, June 27, 2012)

27

Questions?

Thank you for your participation!

28

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30

Conference Call Training Session

The learning activities to be used in this training session are a couple of activities for the individual offices to discuss and design; another learning activity will be a PowerPoint presentation to discuss the proper steps to conduct a conference call and its tie to putting together a basic speech.

Activities.

A. Discuss proactive and reactive public information in communicating with emergency managers.

B. Discuss the current office policy for conducting conference calls. Determine any weaknesses within the current policy and present them to the group.

C. Organize an email account of emergency managers and other important partners for conference calls. Divide the group as needed

into sub-groups such as per location to ensure adequate access to any

proposed conference call.

Visual Aids. This training session is designed to be offered through a webinar which

made it logical to create a PowerPoint presentation to provide the information. The

PowerPoint presentation includes the learning activities which are each individually on

their own slide. Slides from the PowerPoint can be found below and are in their

numerological order.
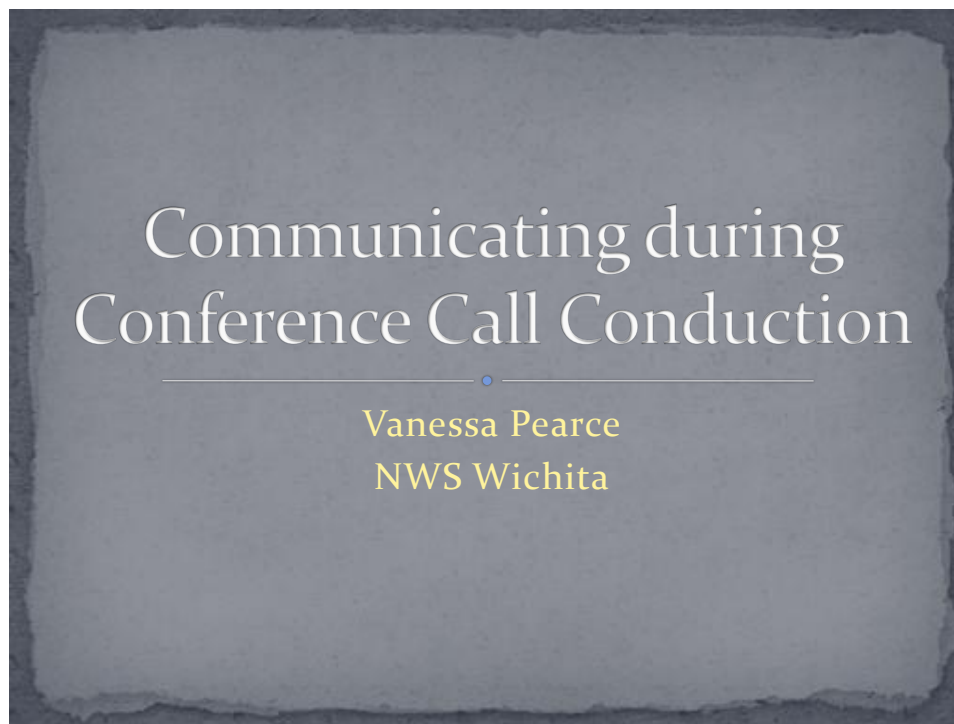
Outline

- Public information
- Interpersonal communication with external partners
- Effective teams
- Benefits of conference calls
- Emergency manager poll
- Conference call outline

2

Public Information

- Purpose: Convey info that "saves lives, protects property, and minimizes negative impact on environment" (Emergency Management Institute, 1996)

3

Proactive versus Reactive Public Info

Proactive

- Reaching out to external partners
- Anticipate impactful hazards
- Plan to meet public needs
- Provide "timely and accurate" information (Emergency Management Institute, 1996)

Reactive

- Lack of preparation
- "Insensitive" to "needs, interests, or concerns" of public (Emergency Management Institute, 1996)
- Uncertainty in public trust

4

Discuss proactive and reactive public information and communicating with emergency managers.

Learning Activity

5

Interpersonal Communication

- Depends on quality of contact
- Involves understanding one's responsibility

"Interpersonal communication is the quality of contact that happens when each person involved talks and listens in ways that maximize the presence of the personal" (Stewart, 1995).

6

Important Communication Element

- Cater to needs of audience
  - Learn the audience
  - Listen to their perspective
  - Avoid offensive wording

7

Efficient and Effective Communication

- "As common ground accumulates, communication becomes both more accurate and more efficient" (Berger, 2002).
- "Combinations of media" can increase communicative efficiency (Walther and Parks, 2002).
- Perceived support
- Workplace relationships

8

Effective Teams in the Workplace

- Clear goal and member roles defined
- Members use skills to help performance
- "Commitment to the team and success" (Aitken, Undated)
- "Collaborative climate" (Aitken, Undated)
- Integrated feedback regarding performance

9

"Workplace relationships function as information-sharing, decision-making, influence-sharing, and instrumental and emotional support systems"
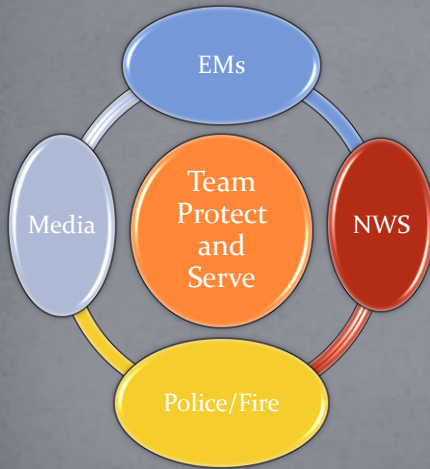
(Sias et. al, 2002).

10

Discuss the current office policy for conducting conference calls. Determine any weaknesses within the current policy and present them to the group.

Learning Activity

11

Benefits of Conference Calls

- Same place same time
- Provide background and level of threat
- Open communication

12

Results from Poll of Emergency Managers

- When?
  - Very large hail, significant wind damage, or significant flooding
  - Strong tornado events
  - Ice storm
  - Snow storm with potential blizzard conditions
- What?
  - Timing
  - Potential path
  - Impacts
  - Special circumstances
  - Confidence level

13

Results continued

- Appreciate ability to share information
- Heightened awareness
- Add bordering counties of CWA if applicable
  - Coordinate with neighboring WFOs on times
- Online briefings
- Muted Phones
- Fresh information
- Record

14

Simplified Outline

- Decide to conduct a call
- Coordinate with neighboring offices on a time
- Notify intended email group
- Prepare introduction/body/conclusion
- Hold call

15

Conference Call Outline

- Outline the threat
- Specify the main risk
- Approximate timing and location
- Uncertainty for this event
- Answer additional questions or concerns
- Suggest contact and communication information for during and after the event
- Support operations with current observed data and its potential impact

16

Conference Call Basics

- Prepare
- Listen
- Clarify
- Short and direct
- End
- Remember audience ALWAYS
- "Be concise, correct, and conversational" (Center for Advanced Media Studies, 1997)

17

Visuals

- Enhance presentation
  - Relevant to topic
- Viewable by all
- Simple and direct
- Directed to needs of audience

18

Organize grouping for an email account of emergency managers and other important partners for conference calls.

Learning Activity

19

Questions?

Thank you for your participation!

20

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