

**The National Incident Management System and Communication:  
Lessons from Hurricane Michael**

**Instructor's Guide**

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<b>Key Terms:</b>	incident command; communication; systems
<b>Student Learning Objectives:</b>	<p>Upon completion of this case study students will be able to:</p> <ul style="list-style-type: none"> <li>● Describe why the National Incident Management System is vital to emergency management operations</li> <li>● Consider the implications of communication loss and the value of networks during a disaster</li> <li>● Discuss opportunities for communication improvement in existing systems</li> </ul>
<b>Overview/Background of Case Study:</b>	<p>On October 10, 2018, Hurricane Michael made landfall in Bay County Florida as the third strongest hurricane to hit the Atlantic coast on record. This storm rapidly intensified from a category 3 to a category 5 storm before making landfall, straining the county’s response capabilities. This storm had a devastating effect on the community. Storm surge is a major cause of damage with many hurricanes, but this one instead brought 155-mile per hour winds that scoured trees from the landscape. HAM radio operators evacuated before the storm hit, and cell towers failed, leaving the emergency operations center (EOC) without communication with the Florida State Emergency Response Team (SERT).</p> <p>Once Hurricane Michael had passed over Bay County, emergency management director Frankie Lumm had to coordinate actions among many teams to preserve the safety of residents, reduce chaos, and return the county to an operational status. His proactive efforts to establish solid ties with both formal and informal networks within the community in the six months prior to this event paid off. Although breaks in communication with the SERT lead to some initial chaos and reduced efficiency, he was able to re-establish communications and get the response back on track. Since then, Frankie has worked continuously to improve the Bay County Emergency Management system and has been essential for building back both the community and their resilience for future events.</p> <p>In this case study, students will be asked to think critically about the National Incident Management System and communication systems used before, during, and after an emergency. Students will be asked to consider four different leadership frames (structural, human resources, political, and symbolic) when evaluating and</p>

	discussing both Frankie’s situation and scenarios they may be faced with in their careers.
<b>Estimated Time:</b>	Approximately 1 week of instructional time, equal to three 50-minute class sections. Homework will be assigned between the first and second class sessions (approximately 90 minutes).
<b>Using this Case Study:</b>	<p><b>Type of Case Study:</b> Appraisal or Issues – Students will be connected to the case study through its central character, Frankie Lumm, the Bay County Emergency Management Director.</p>
	<p><b>Instructional Format:</b> Discussion – Students will be asked to evaluate the implications of communication challenges Frankie Lumm faced through four leadership lenses and answer questions about traditionally structured control hierarchy that focuses on emphasizing a unified, consistent, and repeatable framework. The key goal of this case study is to reinforce the value of understanding and valuing emergency response communications before they are needed. Students will further be asked to relate the case study to their own experiences and anticipated career fields and discuss how proactive communication management could be used to preserve continuity of operations.</p>
	<p><b>Case Study Versions:</b> (explain how this case can be used as a paper and electronic version) This case study should be delivered in a face-to-face setting that can include synchronous online programming. With modifications, this case study may be taught in a moderated, asynchronous online program. There are multi-media and paper-based versions of the case study.</p>
	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>● Multiple videos of Frankie Lumm and other people affected by Hurricane Michael are included in the digital version of this case study.</li> <li>● Multiple articles, including newspaper reports, after action reports, and technical articles are cited in the paper-based case study.</li> </ul>
	<p><b>Student Considerations:</b></p> <ul style="list-style-type: none"> <li>● This case study was designed for students to start working through the case study as one large group, before separating into four smaller groups to discuss individual leadership frames. Large classes may benefit from multiple smaller groups that discuss the same leadership frames. Individual student assignments are acceptable for this case study.</li> </ul>

	<ul style="list-style-type: none"> <li>● The publication by Sowcik et al. (2017) should be assigned as pre-reading with the case study. National Incident Management System documentation cited in the case study can be assigned to students to further clarify the system utilized by Frankie and other emergency management personnel.</li> </ul>
<p><b>Leadership Frames:</b></p>	<p>To learn about leadership and the greater impact of decisions made, you can use the four leadership frames outlined by Bolman and Deal (2008) and summarized in brief by Sowcik, Carter, and Mckee (2017). In this case study, each group of students will be assigned one of the four leadership frames to answer questions about Frankie Lumm’s communication approaches and how they fit in.</p> <ul style="list-style-type: none"> <li>● The structural frame focuses on the organizational structure and considers whether the current structure is the best for the current environment the organization operates in. Students should consider why emergency operations are handled in a standardized way and weigh the pros and cons of standardization vs. flexibility for emergencies. Additional thought should be given to the benefits the NIMS (National Incident Management System) structure provides for collaboration between agencies.</li> <li>● The human resources frame focuses on the human capital in an organization – the employees and other connected individuals. Students should reflect on the training level that EOC personnel responding to Hurricane Michael had and consider what other training measures could have helped with this disaster response. Students should also think about how individuals that go above and beyond could be rewarded, recognized, or reprimanded.</li> <li>● The political frame focuses on networks and power dynamics between the organization and local/regional/national organizations and institutions. It also considers the distribution of resources between organizations and explores the connections between different networks and the impact that formal and informal power and influence have on the organization. For this frame students should consider the power dynamics within emergency management. This includes how much influence Frankie holds as the Bay County Emergency Management Division Chief, and whether he has more formal or informal power. Students should consider how this drives leaders to form proactive communication networks for disaster planning.</li> </ul>

	<ul style="list-style-type: none"> <li>● The symbolic frame focuses on the culture of the organization. It includes things like the history, vision, mission, and values of an organization and explores how these items hold the organization together. In this case, the institution is an extension of the public, and as a result public image is a critical component. Students should think about what the public perception of Bay County’s response was, and whether it is essential to have specific values and missions established for an institution before an emergency. Students should consider how actions by individuals and institutions can build morale.</li> </ul>
<p><b>Suggested Teaching Outline:</b></p>	<p><b><u>Day 0</u></b>  <b>Delivery format:</b> Reading/Video</p> <ul style="list-style-type: none"> <li>● Assign reading of paper-based case study</li> <li>● Assign watching of digital case study</li> <li>● Assign readings of Sowcik et al. (2017), and selections from provided documents.</li> </ul> <p><b><u>Day 1</u></b>  <b>Delivery format:</b> Lecture/Class Discussion</p> <ul style="list-style-type: none"> <li>● Brief overview/refresher of case study (10 minutes)</li> <li>● Large group discussion of <i>Content</i> questions (15 minutes)</li> <li>● Brief overview/refresher of leadership frames (10 minutes)</li> <li>● Small group discussion of leadership frame questions (15 minutes) <ul style="list-style-type: none"> <li>○ Split class into four groups</li> <li>○ Assign one leadership frame to each group</li> </ul> </li> <li>● Homework – Finish answering leadership frame questions and prepare a 10-minute presentation for the next day.</li> </ul> <p><b><u>Day 2</u></b>  <b>Delivery Format:</b> Group Presentation</p> <ul style="list-style-type: none"> <li>● Structural Frame Questions (10 minutes)</li> <li>● Human Resources Frame Questions (10 minutes)</li> <li>● Political Frame Questions (10 minutes)</li> <li>● Symbolic Frame Questions (10 minutes)</li> <li>● Homework – Individually answer the <i>Integrated</i> questions and hand-in the written answers the next day.</li> </ul> <p><b><u>Day 3</u></b>  <b>Delivery Format:</b> Lecture/Video/Class Discussion</p>

	<ul style="list-style-type: none"> <li>● Briefly summarize leadership frame presentations and answer student questions (10 minutes)</li> <li>● Large group discussion of <i>Integrated</i> questions (15 minutes)</li> <li>● Large group discussion: Apply this case study to your own experiences and career field. What emergencies could impact you? What communication pathways have you established in case of personal or professional emergency? Consider Frankie’s proactive network building choices. (20 minutes)</li> <li>● Wrap-up case study and highlight the importance of proactive planning and communication before emergency situations arise and how situations can be judged using the different leadership frames (5 minutes)</li> </ul>
<p><b>Summative Assessment:</b></p>	<p>Students will be assessed as a group and individually. Group presentations of the assigned leadership frame questions will be assessed following the provided rubric. Individual students will be assessed based on the integrated questions answers they turned in, following the provided rubric.</p>
<p><b>Resources Needed:</b></p>	<ul style="list-style-type: none"> <li>● Paper-based case study</li> <li>● Digital case study – INSERT LINK HERE</li> <li>● Sowcik, M., Carter, H., &amp; McKee, V. (2017). <i>Reframing leadership</i>. Gainesville, FL: UF/IFAS Extension (EDIS Publication AEC 622). <a href="https://edis.ifas.ufl.edu/wc284">https://edis.ifas.ufl.edu/wc284</a></li> <li>● Florida State Emergency Response Team. 2019. Hurricane Michael After Action Report and Improvement Plan. State of Florida. <a href="https://portal.floridadisaster.org/SERT/AfterActionReports/Real-World%20AARs/Hurricane%20Michael%20AAR-IP%201-7-19.pdf">https://portal.floridadisaster.org/SERT/AfterActionReports/Real-World%20AARs/Hurricane%20Michael%20AAR-IP%201-7-19.pdf</a></li> <li>● Ready.Gov Incident Management. <a href="https://www.ready.gov/incident-management">https://www.ready.gov/incident-management</a></li> <li>● National Response Team. Incident Command System/Unified Command (ICS/UC) Technical Assistance Document <a href="https://www.nrt.org/sites/2/files/ICSUCTA.pdf">https://www.nrt.org/sites/2/files/ICSUCTA.pdf</a></li> <li>● Gov. Scott Releases Updates on Hurricane Michael Recovery in Bay County. 2018. <a href="https://www.floridadisaster.org/news-media/news/20181102-gov.-scott-releases-updates-on-hurricane-michael-recovery-in-bay-county/">https://www.floridadisaster.org/news-media/news/20181102-gov.-scott-releases-updates-on-hurricane-michael-recovery-in-bay-county/</a>.</li> <li>● United States. Department of Homeland Security. 2011. National Incident Management System training program. Washington D.C.: Dept. of Homeland Security. (IS-0700 B.)</li> </ul>