

# Continuity of Operations (COOP) Planning at NASA Langley Research Center

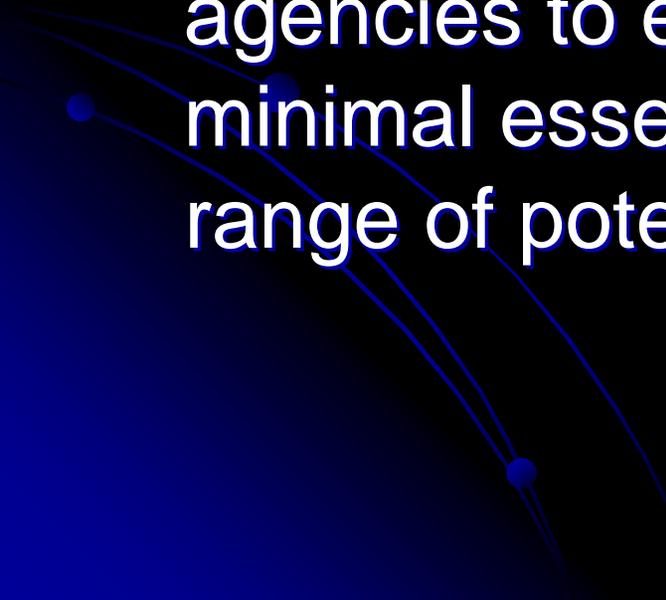
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# What is COOP?

According to Executive Order 12656,  
Federal Response Plan, it is:

“An effort within individual departments and agencies to ensure continuance of their minimal essential functions across a wide range of potential emergencies.”



# A Variety of Threats to Normal Operations



1995                      1999                      2000                      2001                      2003                      2005

Oklahoma  
City  
Bombing

Floyd

Y2K

9/11

Isabel

26 named storms

# What is a COOP Plan?

- Continuity of Operations
  - A program to assure that capability exists to continue essential operations and recover from events that disrupt normal operations including



- Severe weather events
- Utility outages
- Fires
- Mechanical failures
- Security-related incidents



# Why have a plan?

- If we don't provide essential services why do we need one?
- What do we do when the fire trucks leave or the wind stops blowing??
  - It's not something you can just make up as you go along and have it be successful
- Oh yeah... NASA says you have to have one – NPR 1040.1

# Elements of COOP

- Delineate essential functions and activities
- Decision process for implementing COOP plan and procedures
- Roster of trained and equipped personnel authorized to implement those plans and procedures
- Procedures for communicating with employees and activating the COOP team

# Elements of COOP

- Succession plans and Delegations of Authority
  - Ability to operate COOP Team from an alternate location
  - Security and communications
  - Training on the plan, exercising the plan, revising the plan
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# Main Goals of LaRC COOP Plan

- Ensure the safety and health of the general public and LaRC personnel
- Protect mission essential infrastructures (MEIs), LaRC facilities, equipment, vital records, and other assets
- Augment existing Emergency Response Plan
- The reality.....
  - Get the gates open and resume operation ASAP to start doing work for our customers
    - People need a sense of normalcy after disaster
    - Center closure has high financial burden

# Can we really “COOP”?

- COOP is usually driven by relocating operations
- Aircraft can be flown away
- Everything else.....
  - It's kind of hard to move wind tunnels



- Our COOP organization may need to relocate to coordinate recovery and restoration efforts
- Main effort will be to prioritize recovery based upon MEIs and research priorities

# Have we been in “COOP mode” before

- Sort of.....but not really
  - Y2K
    - LaRC developed a team to ensure that operation was not significantly affected
    - Ended up being a non-event
      - At least it was a start and good practice
  - Hurricane Isabel
    - Rideout team stayed onsite for storm
    - LaRC was closed for 6 days
      - No power for 3 days
    - Mostly facility restoration activities
    - Recovery efforts went on for at least a year

# Lessons Learned from Katrina

- The last step in the Stennis Emergency Response Plan:
  - “Storm Clears Center – turn in radio and flashlight to EOC” – from a presentation given by David Throckmorton
  - Volumes could be written on all of the events at Stennis *after* Katrina passed through
- Whatever Michoud did, we need to work towards
  - They had a plan that was useful.....*and used*
  - They had practiced – their people and equipment were ready

# How did we get our COOP plan?

- Initially contracted out to a “COOP Consultant”
  - Unfamiliar with LaRC operations and NASA’s approach
  - End product was not every good....or usable
- We agreed to do a rewrite taking account our own lessons learned as well as those of others
- Rewrite was distributed to organizations with COOP responsibilities
  - Further refinement/input
  - Development of their own organizational COOP plans

# COOP Phases

- **Planning**
  - Should be going on all the time
- **Activation and Relocation**
  - Notify the COOP Organization
  - Get them together
  - Establish communications
- **Impact Assessment**
  - How bad was the event?
  - What can and can't we do?
- **Recovery**
  - Based upon current mission priorities
    - What needs to be brought back first or relocated (if possible)
    - What will it take to get running again?



# OH and EH Role in COOP



- Consider the most likely scenarios for COOP activation
  - Most involve potential for significant facility damage
  - Some have significant health issues
    - Terrorist Events
    - Industrial/ HazMat accidents
    - Pandemic Flu and other Outbreaks

# OH and EH Role in COOP

- OH, EH, and EAP input is needed
  - Ensure the health and safety of the emergency response and recovery personnel
  - Make judgments on the health and safety issues related to recovery from an incident
    - This can be crucial in properly directing resources
    - The “decision-making in the face of uncertainty” issue



# EH Professional Role

- One EH member to work with the COOP organization as an advisor
  - Disseminate and translate information from the field
  - Provide expertise to answer questions that arise
- Most will work “in the field”
  - Industrial Hygiene and Safety Assessment
    - Sampling as needed
  - Generate Health and Safety procedures for work processes
  - Training
  - Oversight of work

# Facility recovery operations

- We have facility assessment checklists
- We have “hurricane kits”
  - Tarps, duct tape, hand tools, lighting
  - PPE
  - Chainsaws
  - Generators
  - Communications
- Kits are all in a trailer so we can take them with us if we have to relocate



# What we've learned....so far

- Segregate your Emergency Response/EOC and COOP elements
  - Physically as well as procedurally
- Make sure the right parties are brought in early to help develop the plan
- You must have buy-in from the top to make this work ... which we have
- Consider how you get hold of the COOP Organization if you have NO power
  - .....now do it without landlines or cell phones, or the Center phonebook

# What we've learned...so far



- If the impact of the event is extensive (i.e., hurricane) it is a different ballgame
  - How do you get work done if you have to compete for resources?
  - How do you account for and recall your personnel?

- You need to have the supplies that you think you will need on hand
- Appoint someone to be in charge of the plan
  - It needs to be a living document



# Questions for you

- Do you have a plan?
  - You most likely have a COOP plan on paper but...have you read it and how good is it?
  - You may already have unofficial plans for how to COOP. They just need to be formalized.
- Have you figured out how to account for and recall your employees and contractors?
- What is the EH role in your COOP?

# Summary

- COOP is about what happens after the event has passed
- You're not asking people do things that they don't normally do. You're asking if they can do it from anywhere.
- You can either pay for it now or really pay for it later

*“Plan, plan some more, replan.....and plan again”  
David Throckmorton, Deputy Director of Stennis*

# Questions??

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