OVERVIEW OF USACE PL 84-99 AND LEVEE SAFETY PROGRAM
US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

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Omaha District
08 December 2016

“The views, opinions and findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”
AGENDA

- USACE PL 84-99 Response Authorities
  - Advanced Measures
  - Emergency Operations
  - Flood Fight Equipment

- USACE PL 84-99 Rehabilitation Program
  - Overview
  - Eligibility Requirements (Past, Current and Future)
  - System Wide Improvement Framework

- USACE Levee Safety Program
  - Overview
  - Inspections, Alterations, Risk Screening/Communication Initiative
  - USACE and FEMA
USACE RESPONSE AUTHORITIES

- **Legislation**
  - Public Law 84-99
    - Discretionary authority given to the Corps by Congress to act and react to emergencies caused by floods, contaminated water sources, and drought.
  - Public Law 93-288 - Robert T. Stafford Act Disaster Relief and Emergency Assistance Act
    - Authorizes the President to provide financial and other assistance to State and Local governments, certain private nonprofit organizations, and individuals to support response, recovery, and mitigation efforts following presidentially declared major disasters and emergencies.
    - FEMA Mission Assignments
Program Authority
- Public Law 84-99 provides an emergency fund to be expended for:
  - Preparation for emergency responses to any natural disaster
  - Flood fighting
  - Repair & restoration of flood control works and hurricane shore protection (coastal storm damage projects)
- Executed through the Flood Control and Coastal Emergencies (FCCE) appropriation

Program Activities:
- Preparedness
- Response
  - Advance Measures
  - Emergency Operations
  - Water Assistance
- Rehabilitation
- Hazard Mitigation
Preparedness

- Planning for Quick and Effective Response
- Emergency Management Organization
- Disaster Planning
- Training
- Exercises
- Stockpiling Supplies and Critical Flood Fight Materials
- Public Assistance Including Liaison, Coordination, and Inspections
EXAMPLE FLOOD FIGHT TRAINING SLIDE

Water Flow

Pipe Development (Movement of Material)

Sand Boils with movement of material
Response

- Assistance is Always Supplemental to state, tribe, and local efforts
- Field Investigation & Reconnaissance of Flood Potential
- Flood Fighting (temporary measures)
- Technical and/or Direct Assistance
- Assist in Rescue Operations
- Contracting for Emergency Construction
- Post Flood Response
- Emergency Debris Removal
- After Action Review & Reporting
PL 84-99 – THE USACE EMERGENCY MANAGEMENT AUTHORITY
HOW TO REQUEST ASSISTANCE

- Activation of Federal Resources
  1. County/City
  2. State or Tribe
  3. Federal

- Advanced Measures (forecasted) and Emergency Operations (at or above)
  - Technical Assistance (Request needed from State EM or Tribe)
  - Direct Assistance (Request needed from Governor or Tribe)
    - Advanced Measures – Direct Assistance project needs to be economically justified and approved by HQUSACE
PL 84-99 – THE USACE EMERGENCY MANAGEMENT AUTHORITY
ADVANCED MEASURES– DIRECT ASSISTANCE
PL 84-99 – THE USACE EMERGENCY MANAGEMENT AUTHORITY
EMERGENCY OPERATIONS – DIRECT ASSISTANCE

Main Ditch 6, Hamburg, IA

L-624-627 – Council Bluffs, IA

R-616 – Bellevue, NE

Pierre, SD
PL 84-99 – THE USACE EMERGENCY MANAGEMENT AUTHORITY
ADVANCED MEASURES – TECHNICAL ASSISTANCE FOR ICE JAMS

- Technical Assistance for Ice Jams
  - Dusting Locations
  - Locations for Charges
  - Recommendations on Mechanical Removal of Ice

Note: Technical Assistance Only. **USACE cannot provide direct assistance for the ice jam itself.**
Cold Regions Research and Engineering Laboratory (CRREL)

- Research lab operated by USACE
- Contacted for all ice jam problem areas
- Database maintained and available
- Increase knowledge and causes of Ice Jams
- Effective methods to reduce occurrence and effects
- Omaha District POC: Roger Kay (Hydraulics)

http://icejams.crrel.usace.army.mil/
PL 84-99 – THE USACE EMERGENCY MANAGEMENT AUTHORITY
ADVANCED MEASURES – TECHNICAL ASSISTANCE FOR ICE JAMS

Northwestern Division
Missouri River Region Water Management Office

- Ice Conditions
- Missouri River Forecast Data
- Press Releases

http://www.nwd-mr.usace.army.mil/rcc
PL 84-99 – THE USACE EMERGENCY MANAGEMENT AUTHORITY
ADVANCED MEASURES – TECHNICAL ASSISTANCE FOR ICE JAMS
Equipment & Supplies
• Supplemental to state, tribal, and local efforts
• Sandbags, Pumps, Poly & Innovative Flood Fight Products
• State Sends Request for supplies
• Reimbursement of materials used
• Locals responsible for providing sand, pump power supply (tractor), O&M, & manpower
• Sign equipment loan agreement

OMAHA DISTRICT
• 7.82 million Sandbags throughout the District
• 5195 Super Sandbags
• 1350 LF of Portadam
• 11,520 LF of Hesco
• 2,694 Rolls of Poly
• 3 Sandbag filling machines
• 28 Trailer-mounted PTO-driven pumps
Rehabilitation

- Only “Active” flood risk management projects are eligible for repair
- Non-structural alternatives can be considered
- Federal Projects repaired at 100% Federal cost
- Non-Federal Projects repaired at 80% Federal and 20% Non-Federal cost
  - Sponsor can provide their cost-share in Cash, Work in Kind, or Combination of Both
- Repair to the level of protection provided by the structure prior to the flood.
- Communities/Sponsors responsibilities

Damages must be flood related and exceed $15k in estimated cost to repair.
Omaha District Levees

LEVEES
178 Total Segments
- 149 Federal, 583 Miles
- 29 Non-Fed, 73 Miles

155 Total Levee Systems

8 CHANNEL-ONLY PROJECTS
- 27.5 Miles

6 DRY DAM PROJECTS

MT LEVEES
9 Federal, 22.5 miles
1 Non-Federal, 0.9 miles

6 DRY DAM PROJECTS
PL 84-99 LEVEE REHABILITATION

Little Papio near NFM

Hawarden, IA

Little Sioux near Onawa, IA

Mosquito Creek, Council Bluffs, IA
HOW IS ELIGIBILITY STATUS DETERMINED?

▪ OLD WAY
  ► A levee system that received an overall levee system rating of “Acceptable” or “Minimally Acceptable” was considered “Active” and was eligible for rehabilitation assistance.
  ► A levee system that received an overall levee system rating of “Unacceptable” was considered “Inactive” and not eligible for rehabilitation assistance.

▪ INTERIM WAY
  ► On 21 March 2014, HQUSACE released the Interim Policy for Determining Eligibility for the P.L. 84-99 Rehabilitation Program
WHY?

- USACE will be changing the Rehabilitation Program through a rulemaking process to synchronize with USACE’s strategic direction and advances in flood risk management and levee safety. Eligibility criteria will promote broader flood risk management activities. ***Future eligibility criteria for the Rehabilitation Program will focus on encouraging flood risk management activities such as emergency preparedness planning, risk communication and prioritizing maintenance activities based on risk.***

- Eligibility determinations for channels and dams will remain in a “paused” status and their status will remain unchanged.

- The interim policy does not impact flood fighting policies. USACE will continue to provide flood fighting assistance regardless of status in the Rehabilitation Program.
HOW?

- Interim eligibility will now be based on a subset of the inspection items drawn from the existing levee inspection checklist. An Unacceptable rating on any of the subset items will result in a levee system being put in Inactive status in the rehabilitation program.

****It will be possible to receive an Unacceptable system rating, but determined to be ACTIVE in the Rehabilitation Program, or receive a Minimally Acceptable system rating but determined to be INACTIVE in the Rehabilitation Program.****

- If a levee system comprises more than one levee segment, all segments must meet the interim eligibility criteria for the levee system to be ACTIVE.
How will Eligibility be determined in the future?

- What are the Specific Policy changes being **CONSIDERED** in regards to Eligibility?

  - Strict condition-based assessment to a set of requirements that encourage flood risk management activities such as
    - Risk Communication and Outreach.
    - Demonstration of performed O&M activities.
      - Prioritizing Maintenance activities based on risk.
    - Did you attend the Annual Inspection?
    - Pre-Inspection Form

  - Overall levee system ratings **WILL NO LONGER** be the determining factor for eligibility.

  - Inspections will continue and results provided to the non-federal sponsor.
    - Results will guide O&M activities, identify problem areas and should be utilized to prioritize and sequence risk management decisions
INACTIVE STATUS

- What does it mean?
  - If you are inactive, you are no longer eligible for P.L. 84-99 Rehabilitation Assistance. Local sponsor would be required to repair damages after a flood event at their own expense.

- How does one change their status?
  - INACTIVE levee systems can become ACTIVE by doing the following:
    - Repair deficiencies and ask for a reevaluation or
    - Go through the System Wide Improvement Framework (SWIF) process
SYSTEM WIDE IMPROVEMENT FRAMEWORK (SWIF)

- Intended for projects that are “Inactive” in the Rehabilitation Program; therefore, ineligible for rehab assistance.
- Now, with the System Wide Improvement Framework (SWIF), there is a process for which projects can stay conditionally active in the Rehabilitation Program, while the Sponsor plans and works to correct the deficiencies.
- A SWIF provides committed Sponsors the opportunity to restore their levees, over time, back to USACE standards.
SWIF - PROCESS

- Sponsor submits a Letter of Intent (LOI). It is reviewed and endorsed/approved at District, Division and Headquarters (HQ) level.
- SWIF plan is developed by the levee Sponsor(s) within 2 years of LOI approval.
- Levee sponsor(s) receives a Monitoring Plan on how progress will be tracked.
  - 1 Year Assessments (includes a report from levee sponsor and 60% Draft SWIF plan)
- The SWIF Plan is reviewed and approved thru HQ.
  - SWIF plan is a living document will require annual revisions and re-approval at HQUSACE every 2 years.
- The SWIF Plan must identify funding sources and reasonable milestones to stay active in the Rehabilitation Program.
- The SWIF Plan must include Interim Risk Reduction Measures and a Risk Communication Plan.
- Inspections will continue during the SWIF process.
- Continued eligibility throughout the process relies on the Sponsor’s progress through development of SWIF and implementation of SWIF.
Hazard Mitigation

- Levee Safety Program
- Identify Mitigation Opportunities
- Establish Framework for Recovery
- Silver Jackets Program Coordination
- Interagency Levee Task Force/NSA
- Participate on FEMA/State Hazard Mitigation Teams
- Our authorities for implementing strategies for mitigation of other hazards is limited.
**Life Safety is Paramount**

- Reduce risk through…
  - Dedicated Levee Safety Officer and Levee Safety Program Manager
  - Levee Inspections
    - Routine
    - Periodic
  - Section 408 Alterations (within Federal project right of way)
  - Technical Reviews (outside right of way, but within critical area)
  - Technical Assistance
  - Interim Risk Reduction Measures (IRRM)
  - Levee Risk Screening and Communication
USACE LEVEE SAFETY PROGRAM

- Levee Safety Program Implementation Guidance provided by HQUSACE in 2007 (Post Hurricane Katrina)
  - Designated Levee Safety Officer (LSO) – John Bertino, Jr., PE
  - Designated Levee Safety Program Manager (LSPM) – Andrew Barry, PE
  - Implemented Levee Inspection Tool and Levee Inspection Checklist
  - Create District National Levee Database (NLD)

- Subsequent Levee Safety Guidance
  - Vertical Datum (2006)
  - Section 408 Alterations (2008, 33 USC 408 replaces 33 CFR 208.10)
    - Further guidance in July 2014 (EC 1165-2-216)
  - System Wide Improvement Framework (2011)

- As new guidance is issued by HQ USACE, levee sponsors will be notified how this new guidance will impact them
LEVEE INSPECTION – WHY DO WE INSPECT?

- ER/EP 500-1-1 – Continuing Eligibility Inspections (CEIs)
  - Non-Federal
    - every 2 years
  - Federal
    - Routine (currently annually)
    - Periodic (every 5 years or when funding is available)

- The primary purposes of the CEIs are to prevent loss of life and catastrophic damages; preserve the value of the Federal investment; and to encourage non-Federal sponsors to bear responsibility for their own protection.

- To verify Sponsor compliance with existing agreements.

- Risk Informed Decisions

- Risk Communication

- PL 84-99 Rehabilitation Program Eligibility
LEVEE SAFETY ALTERATIONS
Levee Safety Alteration Reviews

- Levee Safety vets proposed alterations through:
  - Section 408 Reviews – within Project ROW
  - Technical Reviews - 300 feet riverward or 500 feet landward
  - Technical Assistance

- Levee Safety Alterations Manager, Jennifer Gitt, Omaha District

- Reviews ensure alterations or upgrades to the flood risk reduction projects (FRRP) in the PL84-99 Rehabilitation Program will not be injurious to the public interest and affect the USACE project’s ability to meet its authorized purpose.

- Local Sponsors request the reviews, often on behalf of a third party requesting the alteration to the FRRP.
Project ROW and Critical Area

Critical Area
300-feet Riverward and 500-feet Landward of Levee Centerline
Project ROW and Critical Area

Critical Area
300-feet Riverward and 500-feet Landward of Levee Centerline
Project ROW and Critical Area

Critical Area
300-feet Riverward and 500-feet Landward of Levee Centerline
PROJECT PERMIT REQUIREMENTS

- Development Near Levee
  - Section 408 Permit
  - Section 404 Permit
  - Floodplain Permit
  - Other Permits

- 408 Required Prior to 404
- All Separate Permits!
SECTION 408 PROCESS

Requester/Applicant

Written 408 Request
(Per EC 1165-2-216)

• Project Location & Description
• Engineer Evaluations
• Real Estate
• Operation and Maintenance
• Project Schedule
• Plans & Specifications (60% Minimum)

USACE Review
Approve or Provide Comments for Revision

Levee Sponsor
Submits or Endorses
408 Request
OMAHA DISTRICT
Points of Contact

READINESS BRANCH (Public Law 84-99)
Matthew Krajewski, Chief, Readiness Branch 402-995-2448

Emergency Response 24-Hour Phone Number: 402-995-2448
e-mail: cenwo-eoc@usace.army.mil

LEVEE SAFETY PROGRAM
Andrew Barry, Levee Safety Program Manager 402-995-2231
Ryan Buckley, Project Manager, Levee Safety 402-995-2446
Jennifer Gitt, 408 Alterations Manager, Levee Safety 402-995-2443
QUESTIONS?

UNPREPARED?

Plan Now, Don’t Wait for the EMERGENCY
总的概述

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

Tony Krause
Chief, Flood Risk and
Floodplain Management

Omaha District
08 December 2016

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LEVEE RISK SCREENING AND COMMUNICATION
LEGEE RISK SCREENING AUTHORIZATION

Legislation through WRDA 2007 & WRRDA 2014

- Requires making levee information publicly available including location, general condition and potential consequences in the case of a levee breach or overtopping.

Specific Project Authorizations

- USACE has the responsibility to assess levee systems and communicate findings (including associated benefits and risks) in order to ensure the project is delivering the intended federal benefits and/or to carry out more programmatic authorizations such as authorities pursuant to the Rehabilitation Program.
WHY ARE WE COMMUNICATING RISKS: OUR RESPONSIBILITIES...

Answer the Basic Questions
- National Levee Database
  - Inspection Ratings And Eligibility
  Initiated 2007-2009

Risk Context
- Risk Assessments
- Communication
  - Risk Characterization
  - Sponsor Meetings
  Initiated in 2010

Tell the Story

Build Shared Solutions
- Advise
- Plan Path Forward
- Plan Interim Risk Reduction Measures (IRRMs)
  TBD

Answer the Basic Questions
Tell the Story
Build Shared Solutions
How likely is the hazard (flood, earthquake) to occur?
- Probability of Flood Loading

How will the levee perform during the hazard?
- Seepage
- Stability
- Erosion
- Closure systems

What are the consequences for non-performance?
- Loss of life*
- People at risk
- Community awareness and preparedness planning
- Economic damages to structures and contents
- Critical infrastructure affected

*Avoiding life loss is USACE’s top concern.
SCREENING REVIEW PROCESS

1. Conduct Screening Local Districts
2. Check Quality Regional Divisions
3. Check Consistency National QA Cadre
4. Propose LSAC Senior Oversight Group
5. Assign LSAC HQ Levee Safety Officer
6. Communicate Risk
7. Reconsideration District / Division / Sponsor
CURRENT STATUS OF LEVEE SCREENING

The Omaha District has screened 170 levee segments.
CURRENT STATUS OF LEVEE SCREENING

- The communication of the results has been on hold in order to develop a consistent and coordinated process.

- With guidance from USACE HQ, the Omaha District is developing a communication plan to ensure that it is a consistent and coordinated process.

- Upon USACE HQ approval and direction the Omaha District will begin communicating the results.
LEVEE SYSTEM SUMMARY SHEETS

- Resource document, not the only communication tool.
- One summary for each system.
- Coordinate draft with the sponsor including risk reduction actions.
- Coordinate with FEMA.
- Post in NLD at completion.
USACE AND FEMA
<table>
<thead>
<tr>
<th><strong>Administering Agency</strong></th>
<th>PL 84-99 Rehabilitation Program</th>
<th>Levee Certification for NFIP</th>
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</thead>
<tbody>
<tr>
<td>Federal Code</td>
<td>33 USC 701.n</td>
<td>44 CFR 65.10</td>
</tr>
<tr>
<td><strong>Year of Initiation</strong></td>
<td>1953</td>
<td>1986</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Prevent Loss of Life</td>
<td>Insurance Purposes</td>
</tr>
<tr>
<td></td>
<td>Preserve Federal Investments</td>
<td>NOT a health and Safety Standard</td>
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<tr>
<td><strong>Primary Evaluation criteria</strong></td>
<td>Continued Eligibility Inspection (CEI)</td>
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<td></td>
<td>Inspection of O&amp;M activities and that project is being maintained as constructed</td>
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<tr>
<td><strong>Entity Conducting Evaluation</strong></td>
<td>USACE and Sponsor</td>
<td></td>
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<tr>
<td><strong>Primary Benefit to Community</strong></td>
<td>Assistance with Rehabilitation of Flood Risk Reduction Project in event of Flood Damage</td>
<td></td>
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<tr>
<td><strong>Ancillary Benefits</strong></td>
<td>Data from Inspections and Levee Screening Efforts assist in understanding and managing Risk</td>
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<tr>
<td><strong>Minimum Level of Protection for Eligibility</strong></td>
<td>Agricultural: 5yr+1ft of Freeboard</td>
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<td></td>
<td>Urban 10yr+2ft of Freeboard</td>
<td>100-yr+3ft of Freeboard</td>
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<td><strong>Other Eligibility Criteria</strong></td>
<td>For Non Federal Levees:</td>
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<tr>
<td></td>
<td>Side Slopes - 2:1 with 10ft topwidth</td>
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<td></td>
<td>O&amp;M Plan</td>
<td></td>
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<td></td>
<td>Public Sponsorship/Ownership</td>
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<tr>
<td><strong>Continued Eligibility</strong></td>
<td>Acceptable O&amp;M as identified in annual Continued Eligibility Inspection (CEI)</td>
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<tr>
<td><strong>Intermediary Status Designations</strong></td>
<td>Provisionally Accredited Levee (PAL)</td>
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<td>(certification is ongoing)</td>
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<tr>
<td></td>
<td>Levee Analysis and Mapping Procedure (LAMP)</td>
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<td></td>
<td>(how to map uncertified levees)</td>
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<tr>
<td><strong>Alteration Review</strong></td>
<td>408 process (33 USC 408)</td>
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<td>Guidance: EC1165-2-216</td>
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<td></td>
<td>Floodplain Permitting and/or Letters of Map Revision (LOMR)</td>
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<td>Guidance: IS-9</td>
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# USACE AND FEMA – WHAT USACE DATA CAN SUPPORT CERTIFICATION?

## NFIP Requirements and Relation to USACE Activities

<table>
<thead>
<tr>
<th><strong>NFIP Requirements (44 CFR 65.10)</strong></th>
<th><strong>Compliance Can Be Determined Through</strong></th>
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<tbody>
<tr>
<td><strong>CFR Criteria Category</strong></td>
<td><strong>CFR Criteria Subcategory</strong></td>
</tr>
<tr>
<td><strong>Design Criteria</strong></td>
<td>Freeboard (levee height)</td>
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<td></td>
<td>Closure devices for all openings</td>
</tr>
<tr>
<td></td>
<td>Embankment protection</td>
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<td>Embankment and foundation stability</td>
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<tr>
<td></td>
<td>Settlement</td>
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<tr>
<td></td>
<td>Interior drainage</td>
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<tr>
<td><strong>Operation Plans</strong></td>
<td>Closures</td>
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<tr>
<td></td>
<td>Interior drainage systems</td>
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<tr>
<td><strong>Maintenance Plans</strong></td>
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</table>

*Interior drainage. Though the accreditation requirement for interior drainage may not be covered during a USACE risk assessment, USACE and FEMA will ensure the data needed to address interior drainage will be collected.
MT Silver Jackets
Tony Krause, Chief, Flood Risk and Floodplain Management    402-995-2326
QUESTIONS?
OMAHA DISTRICT ONLINE

Internet: www.nwo.usace.army.mil/

Facebook: www.facebook.com/OmahaUSACE

Google+: plus.google.com/+OmahaUSACE

Twitter: www.twitter.com/OmahaUSACE

Flickr: www.flickr.com/OmahaUSACE

YouTube: www.youtube.com/OmahaUSACE

DVIDS: www.dvidshub.net/unit/OmahaUSACE