



**US Army Corps
of Engineers®**

INFRASTRUCTURE ASSESSMENT

INFORMATION PAPER

Infrastructure Assessment Mission:

USACE Infrastructure Assessment (IA) Planning and Response Teams (PRTs) have two main functions: (1) to augment local public works Applied Technology Council-20 (ATC-20) post-earthquake (or ATC-45 post-wind storm/flood) rapid structural assessment capabilities (primarily residential) following a disaster; and (2) to provide a management cell for the full range of ad hoc technical assistance missions that are not covered by other PRTs. Examples of technical assistance and other operations that can be managed by an IA PRT include electrical, mechanical, geotechnical, environmental, and structural engineering applications; urban search & rescue (US&R) support; and water/wastewater infrastructure assessments and repairs.

The purpose of ATC-20/45 structural evaluations is to determine whether damaged, or potentially damaged, buildings are safe for use or if entry should be restricted or prohibited. Buildings are inspected for damage and assigned a safety rating or posting category in a uniform manner. Inspections are closely coordinated with local representatives in conjunction with respective structural safety assessment programs. While the primary function of IA PRT support to structural evaluations involves rapid building inspections, a secondary function is to assess structures that warrant more detailed evaluations for special emergency usage (e.g. hospitals to ensure mass care or school auditoriums that might be used for temporary housing). Special structural inspections are conducted by individuals with an appropriate level of structural engineering commensurate with the complexity and application of the structure. Assessments and other engineering work that fall under other (Technical Assistance) missions are conducted by personnel with expertise specific to mission requirements (e.g. electrical, mechanical, geotechnical, structural engineers).

IA PRTs also include ATC-20 Training Officers who can provide “just-in-time” training to inspectors slated for supporting field assessments. This training takes 6-8 hours to complete. Sources of inspectors include: USACE, contractors, Reemployed Annuitant Program (RAO), local public works, State assets, and other Federal agencies (e.g. Bureau of Reclamation). ATC-20 Training Officers further support structural safety assessment training requirements of other agency programs, such as the Naval Facilities Engineering Command (NAVFAC) Contingency Engineering Response Team (CERT) program, and Structural Assessment and Visual Evaluation (SAVE) training conducted for the Fort Leonard Wood Directorate of Training and Leader Development.

a. **Initial Funding.** Funding requirements of structural safety assessment applications are based on a variety of factors including anticipated volume of inspections, potential length and magnitude of mission, and need for more detailed inspections. FEMA pre-declaration Mission Assignments (MAs) primarily involve the deployment of key PRT members, and/or Subject Matter Experts

(SMEs) to initiate planning efforts and conduct assessments. Following a Presidential Declaration, FEMA will issue an MA authorizing assistance and provide funding. IA Pre-Scripted Mission Assignments (PSMAs) include pre- and post-declaration support for deploying an IA management cell, water/wastewater assessment and repair applications, as well as a \$3M mission to cover 10,000 structural safety assessments.

b. End State. The mission is generally complete when the remaining need for inspections (including re-inspection of repairs) is within the capabilities of local building officials. The mission terminates when all assigned rapid and detailed inspections have been completed as determined by FEMA in coordination with local officials. Generally the initial PRT deployment will last 30 to 45 days. The District assigned to the mission has the responsibility to staff and deploy replacement teams to support the mission through completion in conjunction with cradle-to-grave emergency management objectives.

IA PRT Assignments and Staffing:

a. Lead Division Assignment. As the national lead of the IA PRT Program, South Pacific Division (SPD) Readiness and Contingency Operations (RCO) responsibilities include mentoring/training participating District PRT members, Emergency Support Function # 3 (ESF # 3) Team Leader (TL)/Assistant Team Leader (ATL) cadre members, USACE Local Government Liaisons (LGLs), top officials of state/Federal agencies, other ESF representatives, PRT SMEs, and other response and recovery stakeholders in conjunction with National Response Framework (NRF) objectives; supporting planning and response efforts that bear directly on public safety; developing/implementing training, workshops, tabletop exercises, SOP/mission guides, and innovative procedures/technologies; coordinating with interfacing agencies to optimize training, response, and recovery support; monitoring/strengthening team readiness; and supporting national/international ATC-20 structural safety assessment training requests. Innovative procedures and technologies include developing/improving emergency contracting work scopes and mobile infrastructure assessment tools to support catastrophic event response efforts; leveraging whole-of-community and interagency task force concepts to ensure robust support to assessment and repairs of critical infrastructure; and interactive training tools to foster distance learning. SPD RCO also serves as the national lead for infrastructure assessment response improvement constructs (e.g. National Remedial Action Plan Workshop infrastructure working groups, Senior Leader Seminars); and developing/implementing national-level programmatic doctrine, such as the IA SOP/Mission Guide, Fact Sheets, FEMA PSMAs, Essential Infrastructure Assessment (EIA) SOP, and USACE-EPA Sub-Mission Assignment procedures. Infrastructure assessment initiatives led by SPD RCO include fostering collaborative, interagency approaches to optimize event responses, and cross-walking planning and response efforts with other key agencies and authorities; lead agencies of ESFs, including DHS/FEMA (ESF # 5, 6, 9, 14, and 15), Department of Transportation (ESF # 1), Health and Human Services (ESF # 8), EPA (ESF # 10), Department of Energy (ESF # 12); State-level emergency services; volunteer agencies (VOLAGs); utility commissions; and the private sector. Furthermore, as the national lead of water/wastewater infrastructure assessment and repair missions during Federally-coordinated response efforts, SPD RCO selects, develops, and trains qualified individuals to fulfill national SME support requirements; and maintains the national list of IA PRT SMEs, Water/Wastewater Infrastructure SMEs, and ATC-20 Training Officers.

b. District Assignments. The following USACE Districts have been designated to provide cradle-to-grave IA PRT mission support to emergency response efforts on a rotating basis (current rotational status is available on ENGLink):

LRB (Great Lakes & Ohio River Division) Buffalo District
POA (Pacific Ocean Division) Alaska District
NWS(Northwestern Division) Seattle District
SPK (South Pacific Division) Sacramento District
SAC (South Atlantic Division) Charleston District

Team Staffing: The core IA PRT is comprised of a 6-person team. The fully engaged IA PRT deployed to a response effort can range from a small management cell (e.g. Action Officer and/or Mission Manager, Mission Specialist, Training Officer, Mission Data Manager, SME) to a several hundred member team including full management cell, Inspection Team Leaders, ATC-20/45 inspectors, US&R cadre members, and full array of engineering disciplines associated with ad hoc technical assistance and other engineering services. The core IA PRT includes:

Emergency Support Function (ESF) #3 Action Officer (AO)
Mission Manager (MM)
Mission Specialist (MS)
Mission Data Manager (MDM)
ATC-20/45 Training Officer (TO)
Supervisory Inspection Team Leader (SITL)

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