



December 2021 SETRAC Off the Grid Communications Drill

After-Action Report/Improvement Plan

December 7, 2021

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

EXERCISE OVERVIEW

Exercise Name	Off the Grid Communications Drill
Exercise Date(s)	December 07, 2021
Purpose	The purpose of this drill was to evaluate the effectiveness of the Regional Healthcare Preparedness Coalition (RHPC) to communicate with partners during a region-wide communications disruption.
Mission Area(s)	Preparedness, Response and Recovery
HPP HPP Capabilities	HPP Capability 2 - Health Care and Medical Response Coordination
Objectives	Assess the ability of Regional Healthcare Preparedness Coalition (RHPC) to establish and maintain communications with the coalition members in the event of a region-wide communications disruption.
Threat or Hazard	Region-wide Communication Outage
Scenario	Severe weather caused the disruption of multiple communications systems across Southeast Texas.
Participating Organizations	See Appendix B
Points of Contact	Lisa Spivey – 281-822-4446 lisa.spivey@setrac.org John Wingate – 281-822-4439 john.wingate@setrac.org

ANALYSIS OF HPP CAPABILITIES

Aligning exercise objectives and HPP capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned HPP capabilities, and performance ratings for each HPP capability as observed during the exercise and determined by the evaluation team.

Objective	HPP Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Assess the ability of Regional Healthcare Preparedness Coalition (RHPC) to establish and maintain communications with the coalition members in the event of a region-wide communications disruption.	Health Care and Medical Response Coordination	X			
<ul style="list-style-type: none"> • Performed without Challenges (P): The targets and critical tasks associated with the HPP capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Performed with Some Challenges (S): The targets and critical tasks associated with the HPP capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified. • Performed with Major Challenges (M): The targets and critical tasks associated with the HPP capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Unable to be Performed (U): The targets and critical tasks associated with the HPP capability were not performed in a manner that achieved the objective(s). 					

Table 1. Summary of HPP Capability Performance

The following sections provide an overview of the performance related to each exercise objective and associated HPP capability, highlighting strengths and areas for improvement.

Objective 1 – Assess the ability of the Regional Healthcare Preparedness Coalition (RHPC) to establish and maintain communications with the coalition members in the event of a region-wide communications disruption.

Overview

The December 2021 Off the Grid Drill involved 131 participating agencies in establishing alternative communications in the event of a region-wide communication failure. Of the 131 participants there were 120 that communicated using web-based texting service, eight (8) utilizing the HAM Radio through the Houston Amateur Radio Network, and three (3) participating agencies using satellite to satellite phones.

Additional HAM Information:

The Houston Area Hospital Amateur Radio Network conducted the amateur radio component of the SETRAC Off the Grid Drill on 12/07/2021 from 0900 hrs. to 1100 hrs. The purpose of this component was for hospital radio stations to:

1. Test communication on a directed net with the primary frequency 145.170 using the KA5QDG repeater. Net control used the radio room at Transtar, N5TRS.
2. Test simplex communications between hospitals using 146.440 FM to determine which hospitals can talk direct in event of repeater failure.
3. Optionally and where equipment allows, test digital radio capability by sending a Winlink message.

#1 – Directed Net

These eight hospitals checked in. All were clearly audible with strong signals.

- Houston Methodist Willowbrook
- Methodist Continuing Care
- Memorial Hermann NE
 - Check-in was from HAHET volunteer's (KF5VIK) home radio station because the hospital is not open to volunteers due to COVID19 protocol.
- Christus Dubuis Beaumont
- Texas Children's West
- Texas Children's Medical Center (main campus)
- Texas Children's Woodlands
- HCA Houston Healthcare Northwest

During this component of the drill, hospitals performed checks of backup equipment (radios, cables, antennas). Houston Methodist Continuing Care identified and corrected a power setting on the backup radio that improved the signal. They also identified a second issue that will require additional testing of cabling, connectors, antenna to isolate the issue. The 2-hour duration of net was beneficial for testing backup equipment and getting feedback from other radio operators and facilities.

We were informed that Methodist West hospital did not require participation in this test since their practice is to test once a year. HAHET volunteer radio operators at Houston Methodist Continuing Care and Houston Methodist Willowbrook hospitals participated in this drill.

#2 – Simplex Communication

Hospitals and Houston Transtar attempted simplex (direct) contact with other facilities on frequency 146.440 FM with these results:

Houston Methodist Willowbrook:

- Methodist CCH - full copy
- Texas Children's Hospital West- full copy
- N5TRS Houston Transtar marginal to no copy
- Wb5HJV mobile - marginal to 50% copy while leaving Texas Children's Main
- HCA Houston Healthcare Northwest W5NWM - full copy
- Texas Children's Hospital The Woodlands - strong to full copy

Houston Methodist Continuing Care:

- Houston Methodist Willowbrook – full copy
- Texas Children's Hospital West – full copy
- N5TRS Houston Transtar - weak to 50% copy
- HCA Houston Healthcare Northwest – strong to full copy

HCA Houston Healthcare Northwest:

Houston Methodist Willowbrook – full copy
Houston Methodist Continuing Care – full copy
N5TRS Houston Transtar- full copy
KF5VIK for Memorial Hermann Northeast – full copy

KF5VIK for Memorial Hermann Northeast:

HCA Houston Healthcare Northwest

N5TRS Houston Transtar:

HCA Houston Healthcare Northwest - full copy
Houston Methodist Willowbrook – weak to 50% copy
Houston Methodist Continuing Care – 50% to strong copy
Texas Children's Hospital West – 50% to strong copy

Christus Dubuis attempted simplex communication but was unable to reach any station. That is expected due to distance.

#3 – Optional Digital Radio/Email Message

Winlink digital radio messages received from:

- Houston Methodist Willowbrook
- KF5VIK for Memorial Hermann Northeast
- HCA Houston Healthcare Northwest

Email messages received from:

- Christus Dubuis Beaumont
- PaRC Behavioral Health (email message only, did not participate in radio test)

HPP Capability – Health Care and Medical Response Coordination – Full Capability

Strengths

1. Additional partners are identifying the need for redundant and alternate methods of communications.
2. Participation is reaching new partners and bringing up additional conversations on the region's capabilities and work arounds.
3. Recent Radio Operator training and licensure has continued to build a bigger and stronger HAM Radio network.

Area for Improvement

1. Continue training efforts and education on HAM Radio operations and licensing.

APPENDIX A: IMPROVEMENT PLAN

HPP Capability	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Health Care and Medical Response Coordination	Education	Continue to hold training sessions for HAM Radio licensing due to turnover and hospital visitation policies of external vendors being permitted access during pandemic operations.	SETRAC	SETRAC Training	12/8/2021	Ongoing

APPENDIX B: PARTICIPANTS

Participating Agencies/Facilities
ABL Homehealth Services Inc
Angelina County & Cities Health District
Arising Healthcare Services
Auberge Kingwood
Avenue 360 Health and Wellness
Baptist Hospital Beaumont
Bayside Community Acute Care Svcs
Bayside Community Hospital
Beaumont Emergency Hospital
BEST DOMINION HEALTHCARE SERVICES, INC.
C C C Health Care Inc
CARING PEOPLE, LTD. CO.
Cascades at Port Arthur
Chambers Health
CHI St Luke's Lufkin Memorial
CHI St. Luke's Health Memorial San Augustine
Christus Dubuis Hospital of Beaumont LTACH
Coastal Health & Wellness / Galveston County Health District
Columbus Community Hospital
COLUMBUS OAKS
Commitment To Caring
Communication Essentials
Continuing Care at Eagles Trace
Country Village Care
Cura at Homebridge
Cura Healthcare
Cypress Creek Rehab
Cypress Woods Care Center
DDF Health Services Inc.
DDMS of Houston, LLC
Debok Healthcare Inc
Eden Hospice Care Services Inc
Encompass Health Cypress
Encompass Health Rehabilitation Hospital of Humble
Fall Creek Rehab & Healthcare
Focus Care at Baytown
Focus Care Waxahachie

Focused Care Corporate
Focused Care at Burnet Bay
Focused Care at Orange
Focused Care at Summer Place
Focused Care Cedar Bayou
Focused Care of Center
Fort Bend County EMS
Galway Meadows Care Home
Golden Triangle Emergency Center, LLC
Gulf Coast Regional Blood Center
Harris Health LBJ Hospital
Harris Health System
Harris Health Ben Taub Hospital
HCA Houston Healthcare Tomball
Holly Hall Retirement Community
Hospice in the Pines
Houston Hospice
Houston Methodist Baytown
Houston Methodist Sugar Land
Huntington Health care
Huntsville Memorial Hospital
Kennedy Health & Rehab
Kindred Hospitals Houston Medical Center
Kingwood Emergency Hospital
Kingwood Endoscopy
La Vita Bella
Liberty Dayton RMC
Lifecare Options Home Health
Lufkin State Supported Living Center
Matagorda County EMS
Memeeha llc
Memorial Hermann Orthopedic and Spine Hospital
Memorial Hermann Cypress
Memorial Hermann Children's
Memorial Hermann Home Infusion Pharmacy
Memorial Hermann Katy
Memorial Hermann Northeast
Memorial Hermann Pearland
Memorial Hermann Rehabilitation Hospital Katy
Memorial Hermann Southeast Hospital
Memorial Hermann Southwest
Memorial Hermann Sugar Land
Memorial Hermann The Woodlands
Memorial Hermann TMC

Moody Neurorehabilitation Institute
MRC Creekside Retirement Community
Mzee Home Care Services, LLC
ND HEALTHCARE SRVICES INC
NURSES NIGHT & DAY, INC.
Oakmont Healthcare & Rehab Center of Katy
Oceans Healthcare
OMK healthcare agency LLC
PAM Clear Lake North
PAM Rehab Clear Lake South
Pam Rehabilitation Hospital of Humble
Parkside Surgery Center
Peach Creek Assisted Living
Perpetual Home Health LLC
Pine Arbor
Prime Care Medical Services
PRUCARE HOME HEALTH AGENCY, PLLC
Regent Care Center of Kingwood
RiverKids Pediatric Home Health
Rollingbrook Rehab
SignatureCare Bellaire
SignatureCare Memorial City
SignatureCare Mission Bend
SignatureCare Montrose
SignatureCare Stafford
SignatureCare Westchase
Silverado Hospice - North Houston
Spindletop Center
CHI St Luke's Sugar Land
CHI St. Luke's Livingston
Sugar Land Rehab Hospital
Summit Nursing
Sun Valley Rehabilitation & Healthcare Center
Texas Children's Hospital - Main Campus
Texas Children's Hospital - West Campus
Texas Children's Hospital - Woodlands Campus
Texas Emergency Care Atascocita
Texas Emergency Care Pearland
THE Hallmark
The Medical Resort at Pearland
The Medical Resort at Sugar Land
The Orchard
The Woman's Hospital of Texas
Trinity Rehabilitation & Healthcare

Trucare Hospice and Palliative Services
UT Health HCPC
Village Choice Health Care, Inc
West Wynde Health Services
Windsong Care Center
Windsor Houston