



Humanitarian Assistance & Disaster Response (HADR)

Experimentation Concept



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Technology Experimentation and Training integrated into
Humanitarian Civic Action (HCA) events

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Reference: Joint Pub 3-29

Humanitarian Civic Action

“... is assistance to the local populace provided in conjunction with authorized military operations... Assistance provided under these provisions **must promote** the security interests of both the US and the HN and **the specific operational readiness skills of the members of the armed forces who participate in the activities.**”

- JP 3-29 Foreign Humanitarian Assistance

HCA = resiliency through capacity building

Foreign Humanitarian Assistance (aka HADR)

“...is conducted **to relieve or reduce the results of natural or man-made disasters or endemic conditions...** FHA provided by US forces is limited in scope and duration. The **foreign assistance provided is designed to supplement or complement the efforts of the host nation (HN)** civil authorities or agencies that may have the primary responsibility for providing that assistance.”

- JP 3-29 Foreign Humanitarian Assistance

FHA = post disaster response

HCA Mirrors HADR



Situation

- Frequent HCA and HADR events in PACOM AOR.
- MARFORPAC is traditionally PACOM's lead for HADR planning.
- III MEF is traditionally designated as the JTF in support of HADR
- MEC facilitates S&T experimentation & bridges the gap between technical capability and warfighter requirements.



HADR Experimentation Plan

- HCA events consist of many tactical tasks that are executed at the small unit level in the field
 - ❖ *Live* training
- Command Post Exercises (CPX) consist of tactical and operational levels of command and control staff training
 - ❖ *Constructive* training
- Limited HADR training opportunities linking *Live* to *Constructive*
- **Shadow Exercise (ShadowX) concept:** Use HCA events for HADR training and experimentation to provide *Live* input to *Constructive* training

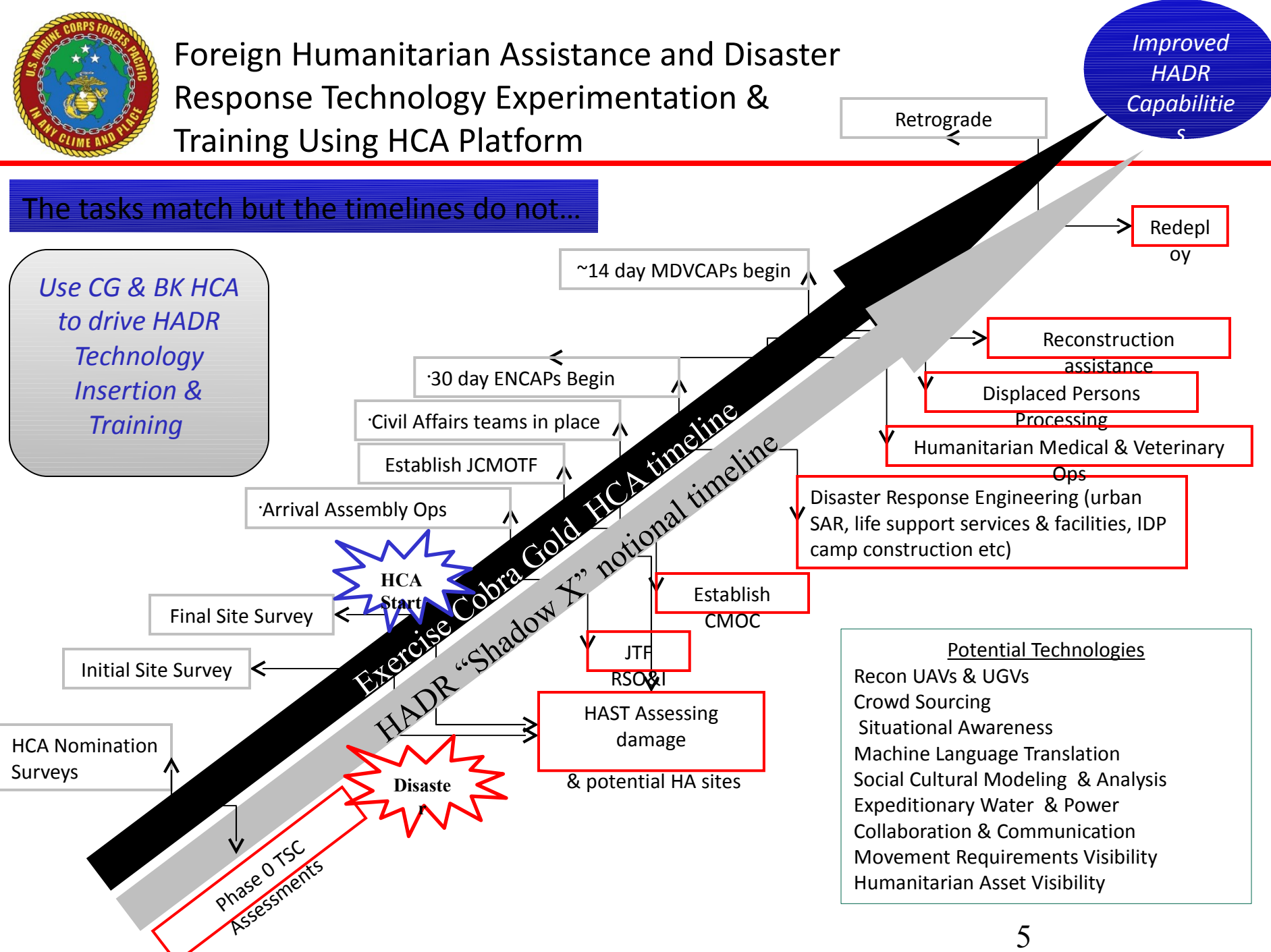


Foreign Humanitarian Assistance and Disaster Response Technology Experimentation & Training Using HCA Platform

Improved HADR Capabilities

The tasks match but the timelines do not...

Use CG & BK HCA to drive HADR Technology Insertion & Training



- Potential Technologies
- Recon UAVs & UGVs
 - Crowd Sourcing
 - Situational Awareness
 - Machine Language Translation
 - Social Cultural Modeling & Analysis
 - Expeditionary Water & Power
 - Collaboration & Communication
 - Movement Requirements Visibility
 - Humanitarian Asset Visibility



Civil & Humanitarian Information Management Experiment (CHIME)

- CHIME focus is field data collection and reporting using smartphones on available commercial communications
- Current paper-based collection and reporting results in reports that are widely varied in quality and relevance
- CHIME reporting can improve current paper-based data collection and reporting methods streamlining and reducing the Data to Action cycle*

Civil & Humanitarian Information
Management Starts in the Field

- Making historical Civil and Humanitarian



Why CHIME in Exercise HCA?

- CHIME in HCA will improve field input to the HA command (i.e. JCMOTF, CMOC, etc.)
 - The HA command will be more efficient in reporting to the exercise JTF or other Live HHQ
 - The HA command can provide operationally relevant and realistic input to the exercise CTF or other Constructive HHQ improving the quality of that command's training
 - Exercise White Cell, as a **Shadow** HA Command, would modify CHIME reports to fit a Constructive CPX scenario's MSEL injects.
 - Example: changing the description of a UAV video feed from a *Live* HCA MDVCAP to video of a *Constructive* IDP camp in the

Humanitarian Assistance requires
Unity of Effort
without
Unity of Command



Exercise HCA Components

- **JCMOTF:** Regimental level unit providing C2.
- **CA:** Civil Affairs detachments provide liaison to local communities informing the local leaders of the benefits and coordinating local support. CA teams are in place before the HCA events, throughout the exercise and often for a short time after an HCA event concludes.
- **ENCAP:** the Engineering Civic Assistance Program builds and renovates buildings and roads. Typically 30 day projects.



Exercise HCA Components

(cont)

- **MDVCAP:** the Medical Dental and Veterinary Civic Action Program conducts field clinics that provide health and vet services to rural communities. Typically 1-2 days per location seeing approximately 1000 patients per day.
- **COMREL:** Community Relations projects are events that address a limited but impactful improvement to local quality of life; e.g. paint a building, clean up a soccer field, hand out school supplies, etc.



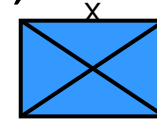
Field Data Inputs to JCMOTF

(not comprehensive)

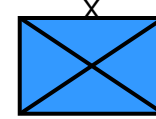
- ~~Site~~ SCAPs
 - ~~Site~~ Community demographics
 - ~~Medical~~ trends
 - ER&UMs
- ~~EN~~ CAPs
- ~~Civil~~ Military Ops
 - ~~District~~ Support Framework (DSF)
- ~~Area~~ Structure Capabilities Organizations People
 - ~~and~~ Events (ASCOPE)
 - PERSTAT
- ~~Key~~ Leader Engagements
- Operations



HCA Information flow supports the Live, Virtual* & Constructive Training model

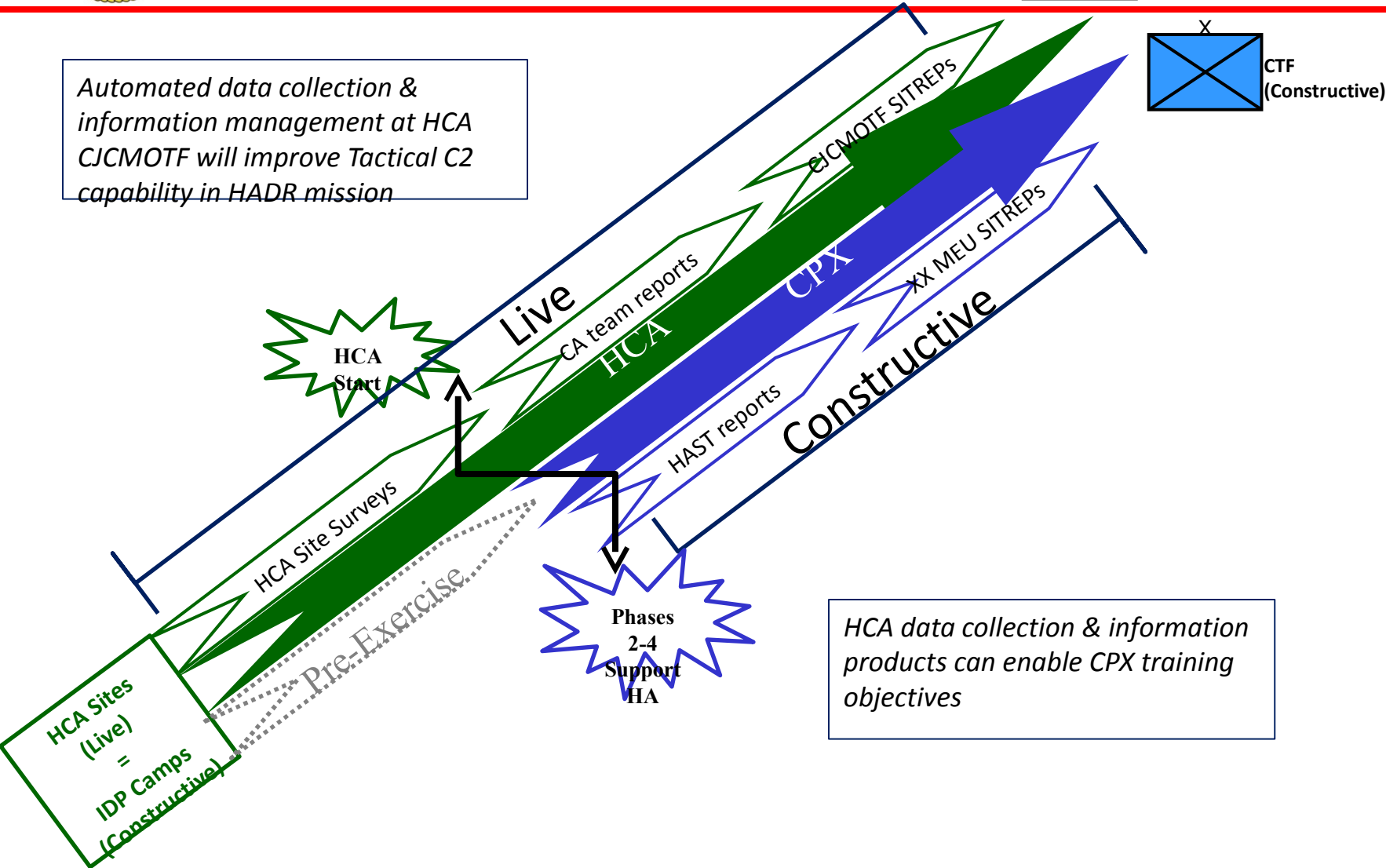


JTF (Live)



CTF (Constructive)

Automated data collection & information management at HCA
CJCMOTF will improve Tactical C2 capability in HADR mission



* No Virtual play planned in CG or BK CPX

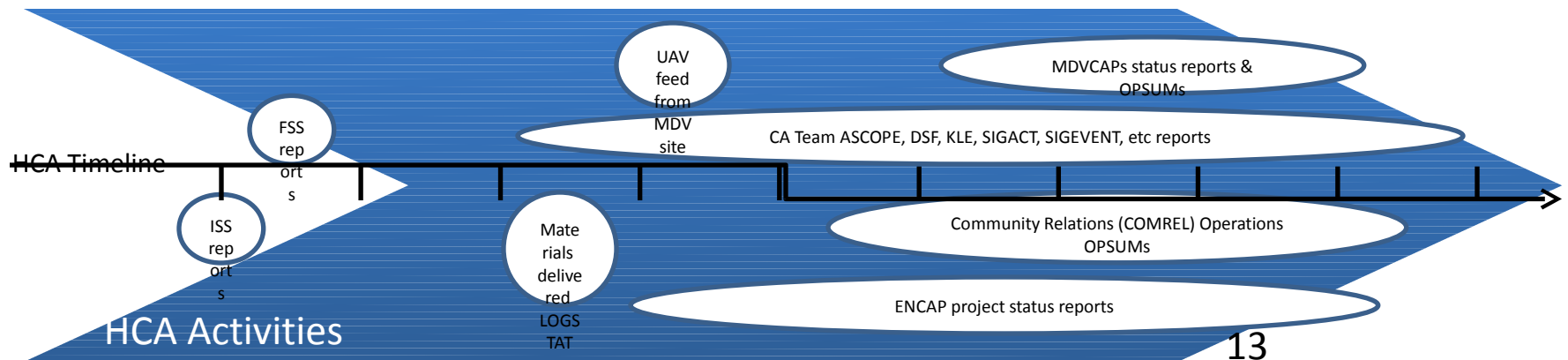


How will we do this?

- Two types of technologies to insert:
 - Point: may have little or no impact on the rest of the ShadowX Exercise writ large and may or may not be impacted by any other technology yet
Could be integrated into the overall scenario
 - Broad: will impact at least one other technology and/or the execution of the exercise mission
- Proposed technologies will have a CONOPs developed or approved by the MEC that address **Below is an example of how Civil Information from HCA will integrate into the CPX employment (i.e. the dashed white arrows in the slide above)** in the ShadowX

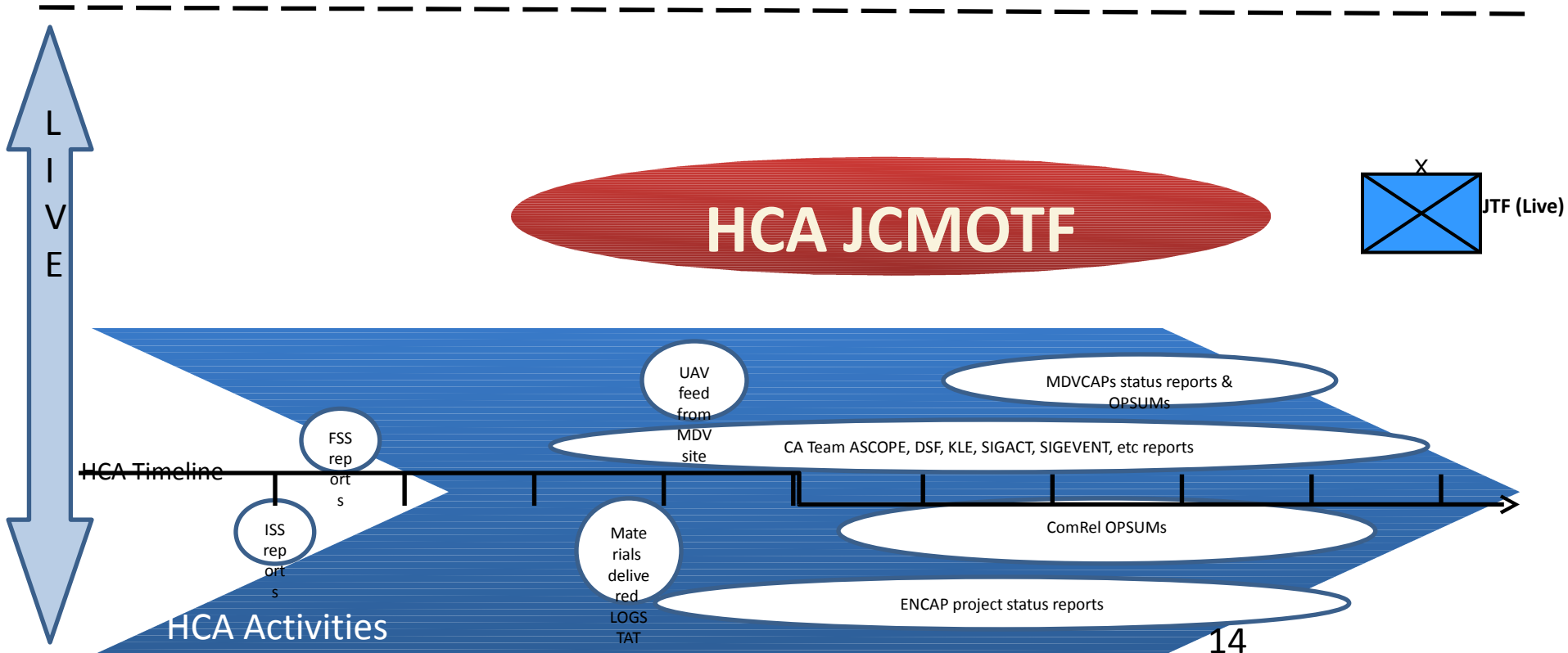


CHIME Data is collected during normal HCA activities & operations



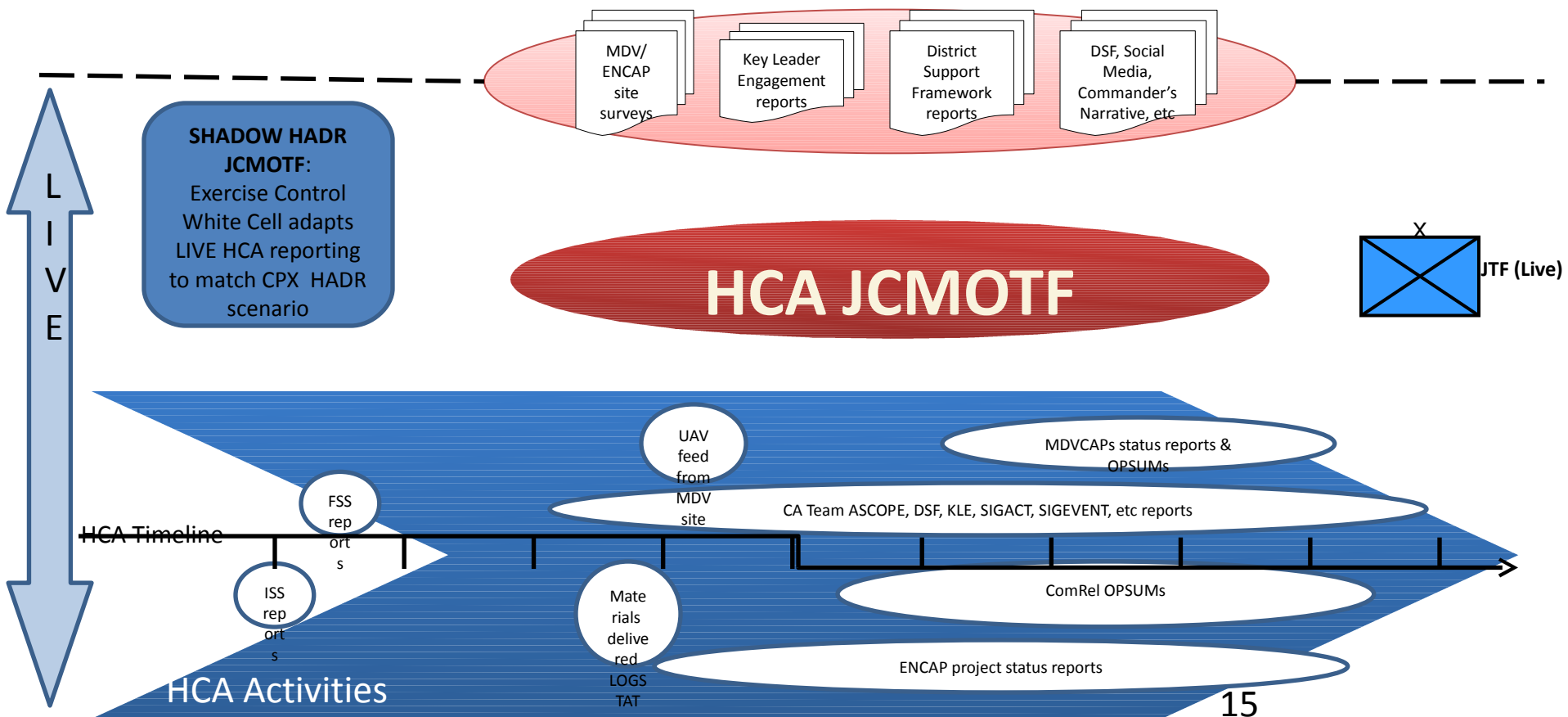


CHIME Data is reported to “Live” JCMOTF where it is used to enhance SA, inform Decisions and accelerate Action



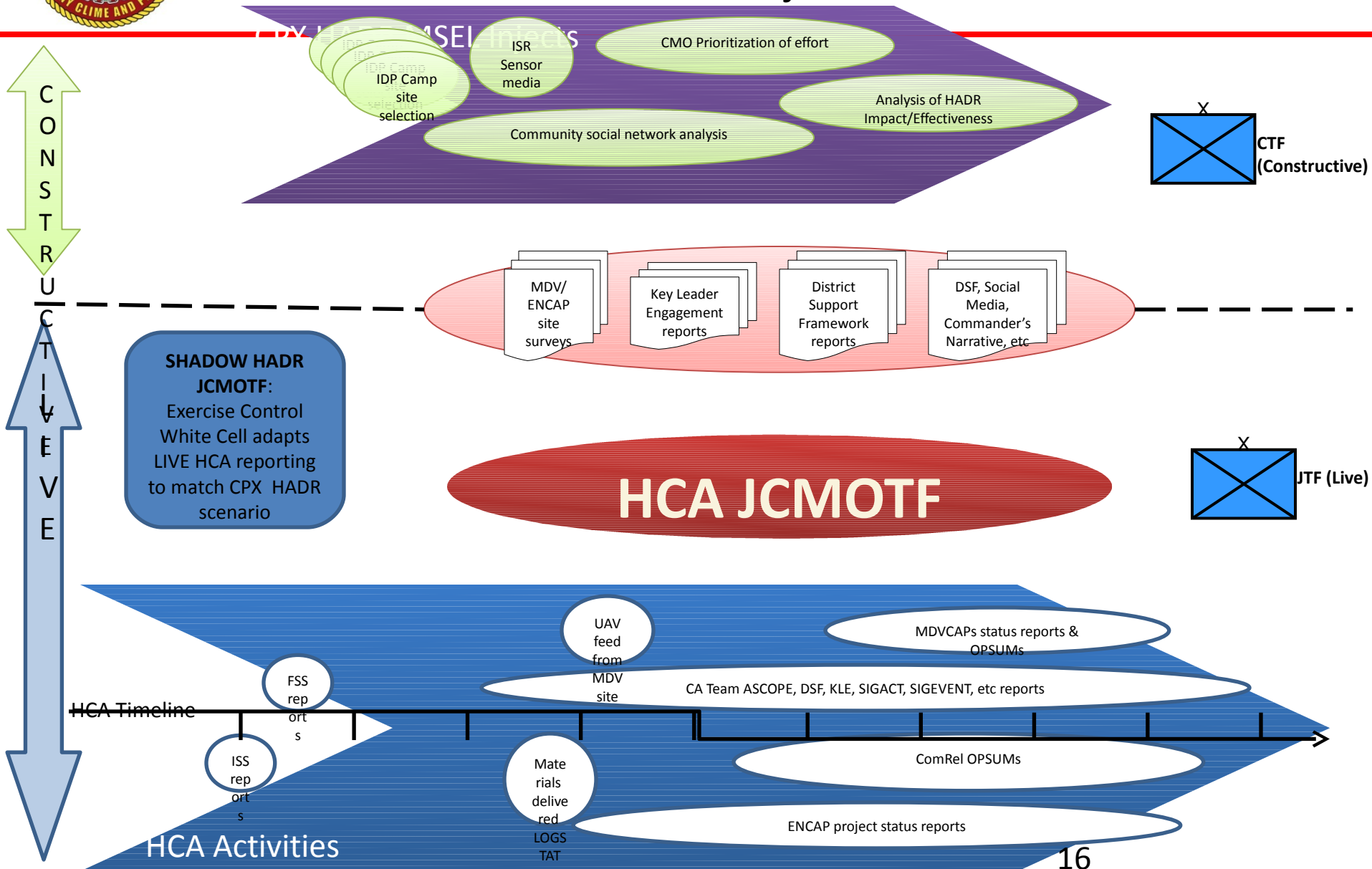


CPX White Cell extracts CHIME from JCMOTF and creates operationally realistic input to Constructive training





HCA Data is reported to Live JCMOTF where White Cell translates it to relevant MSEL injects for the CPX





Reference Slides



Data to Action Cycle

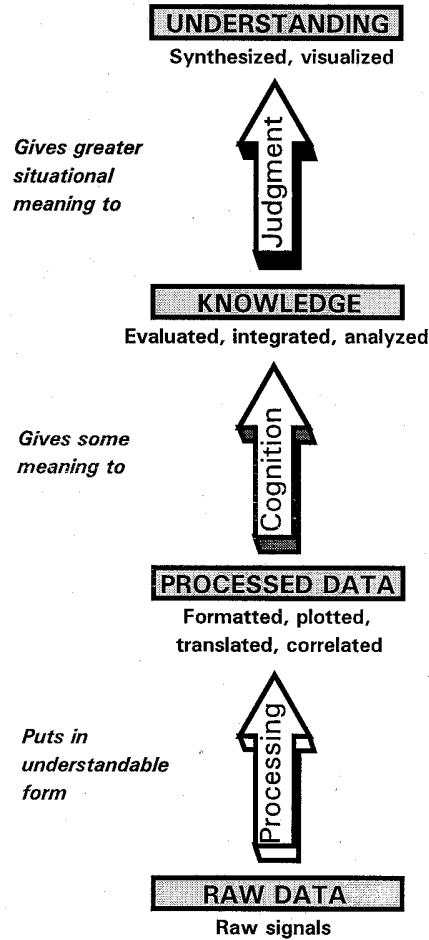


- Data is the foundation for the Decision that leads to Action
- Data must be collected early, widely and frequently to create that foundation

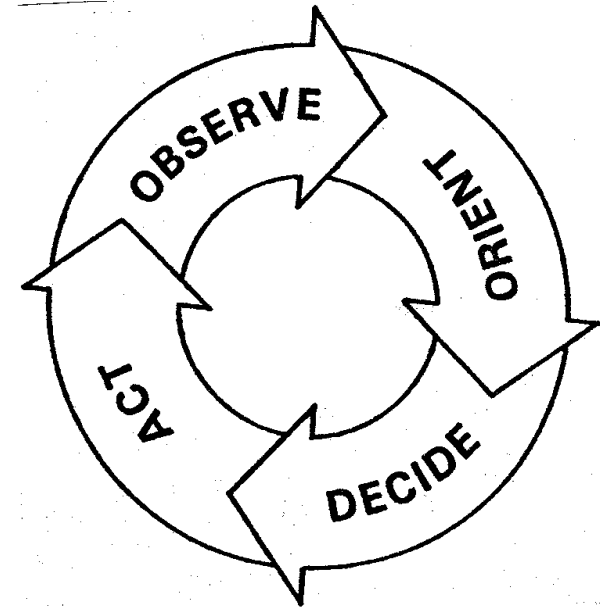
Provided as background info on the information lifecycle



MCDP 6: Command and Control Theory



The information hierarchy



The command and control process:
The OODA loop