

Brigade Trainers

BRONCOS

Achieving Effective CAS





Trends/Fixes



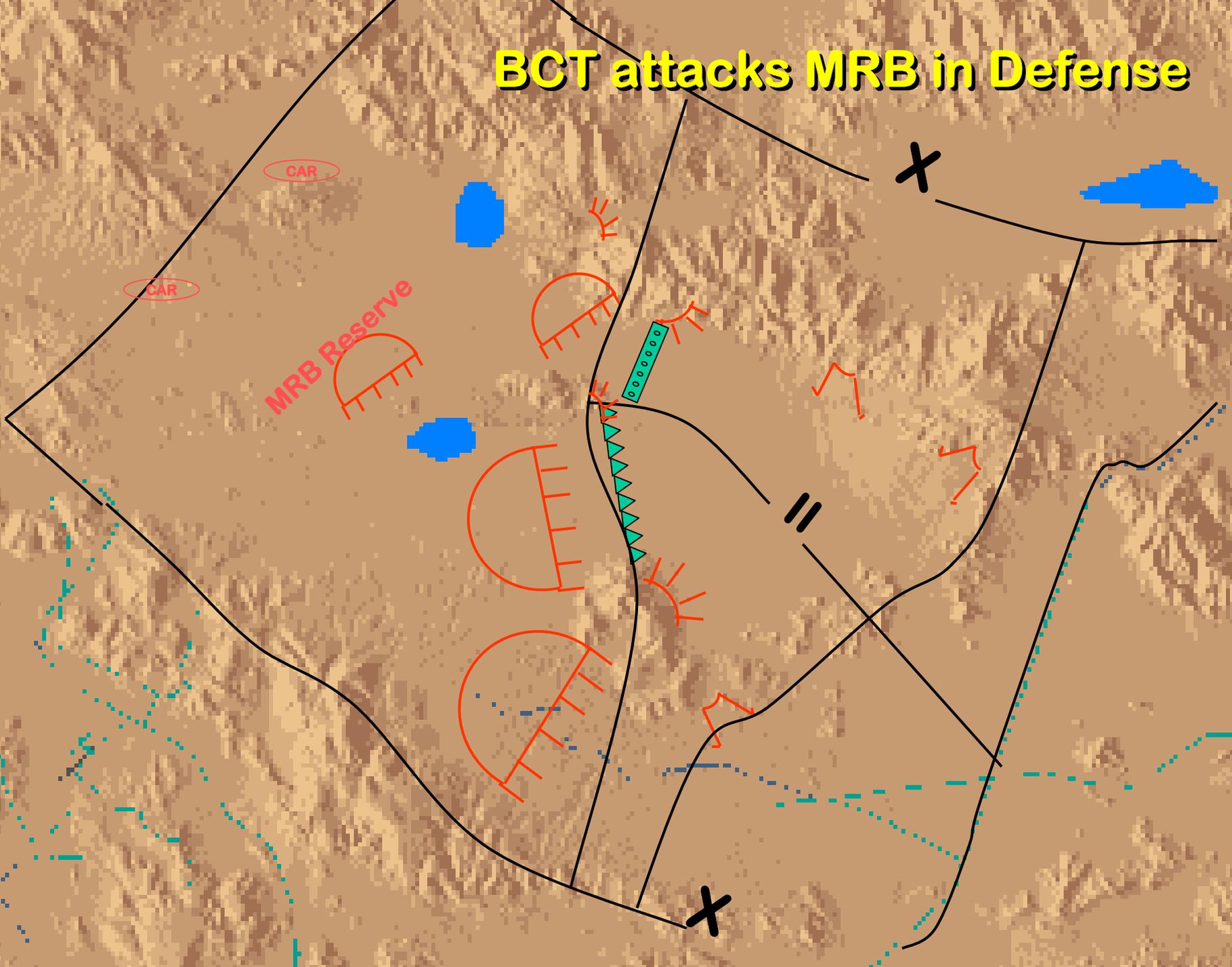
Trends.... In the ATTACK

- BCTs aren't developing a CAS plan for the duration of the battle.
- BCT plans to attack targets/formations long before they are able to locate them.
- ACA Plan doesn't deconflict CAS and other supporting fires for simultaneous attack
- Over-reliance on FAC-A to cover holes in observation plan

"The Result..."

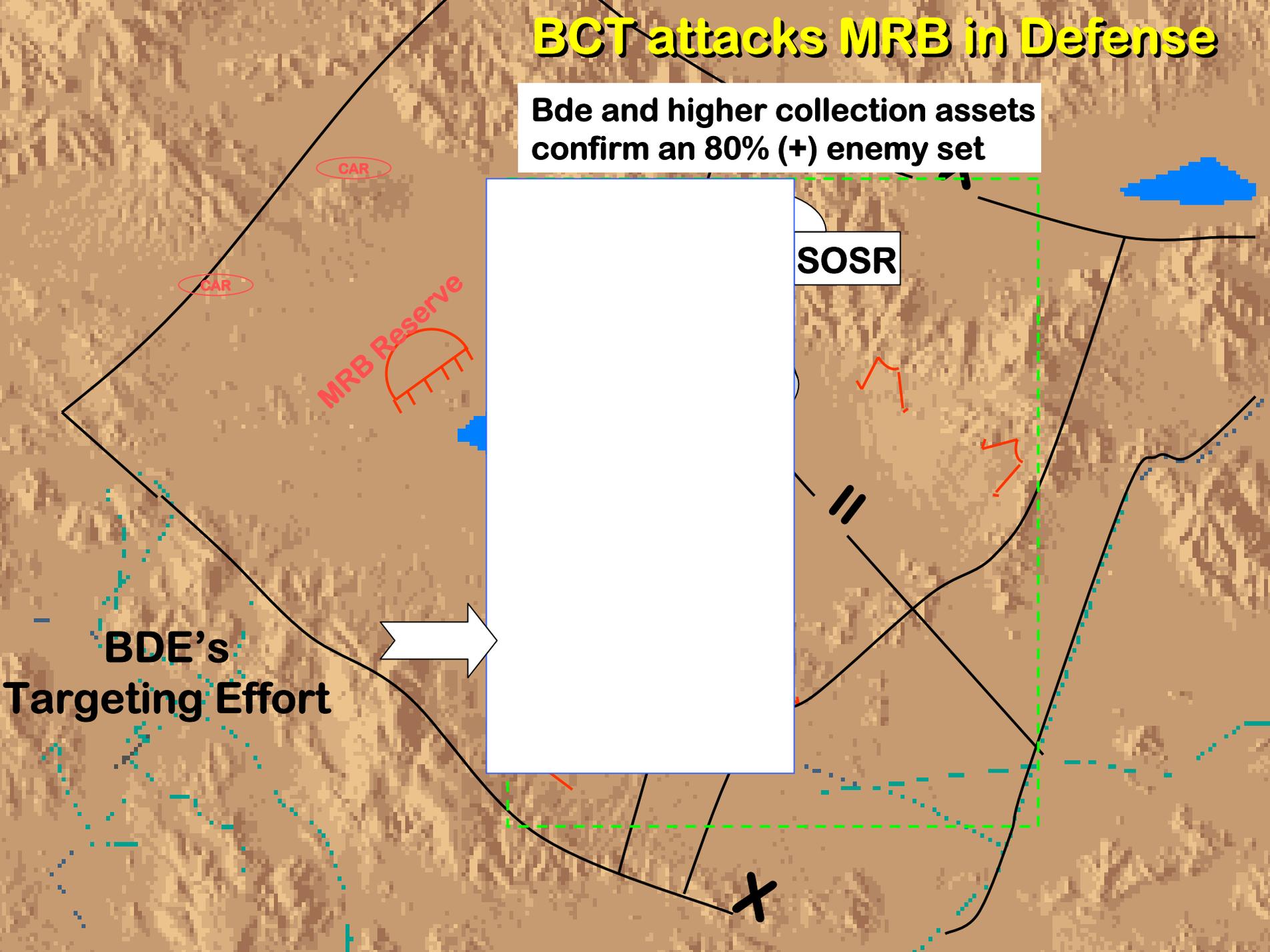
- Intermediate targets between the POP and CAR aren't attacked.
- PUSH CAS is diverted (Unused AF Ordnance)
- Shut down fires to provide a "dump grid" for CAS

BCT attacks MRB in Defense



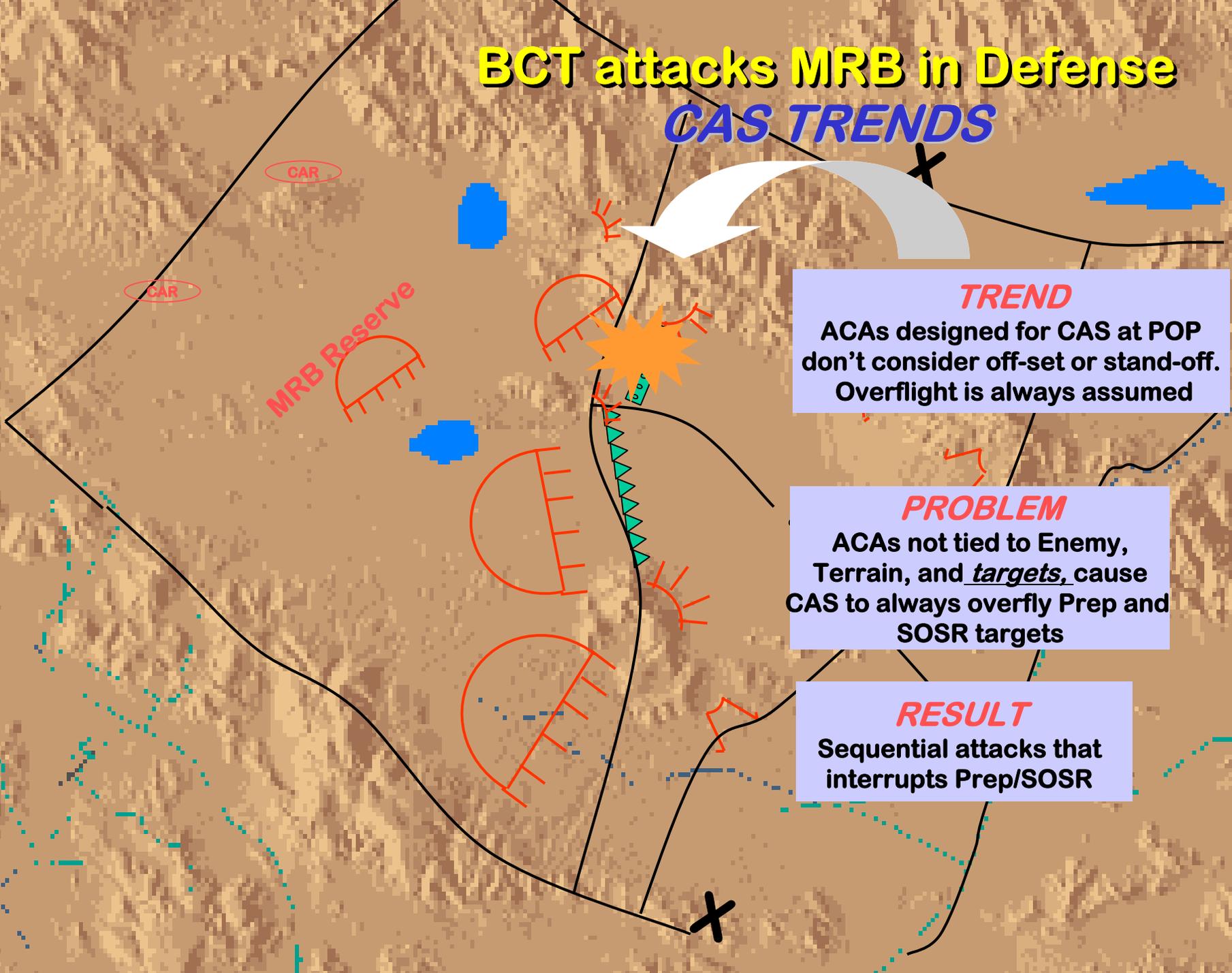
BCT attacks MRB in Defense

Bde and higher collection assets confirm an 80% (+) enemy set



BCT attacks MRB in Defense

CAS TRENDS



TREND

ACAs designed for CAS at POP don't consider off-set or stand-off. Overflight is always assumed

PROBLEM

ACAs not tied to Enemy, Terrain, and targets, cause CAS to always overfly Prep and SOSR targets

RESULT

Sequential attacks that interrupts Prep/SOSR



Trends/Fixes



FIXES.... In the ATTACK

- Use 1972s to influence time windows from LD to CTM
- Isolate MRPs and the MRB reserve prior to attacking the CAR
- Sequence:
 1. MRP/MRP Strong point at POP
 2. Isolate adjacent MRPs from reinforcing or repositioning
 3. MRB Reserve
 4. CAR





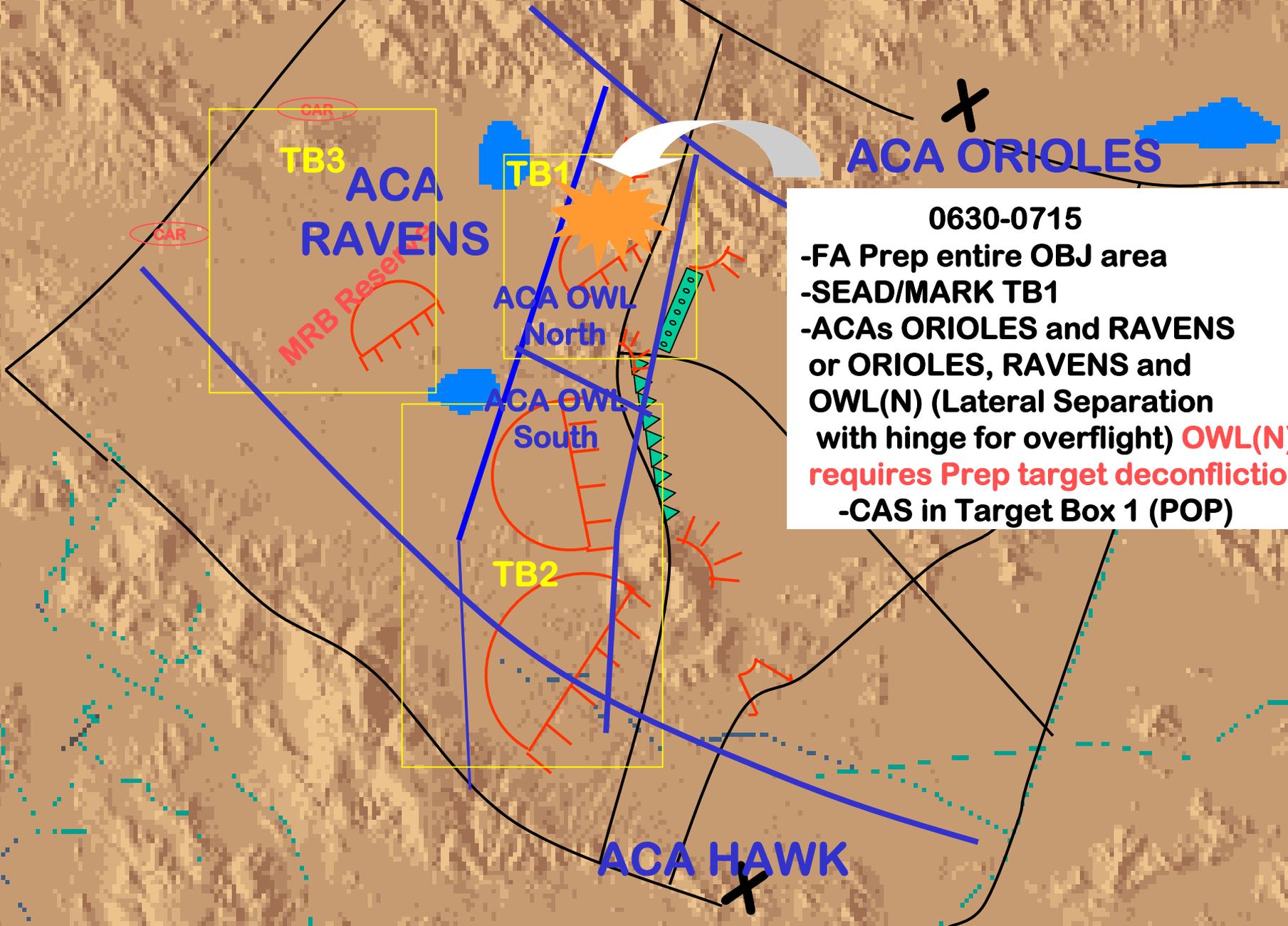
Trends/Fixes



FIXES.... In the ATTACK

- Design ACAs that will accommodate a “steady-stream” of Push CAS:
 - ACAs and targets planned at same time by same planners
 - 4 Kilometer in-gress ACAs on flanks with wide attack ACAs
 - Maximize Stand-off or off-set (Loft or forward firing muns)
 - Avoid running ACAs over objective areas
 - Add a “hinged ACA” for overflight of the objective area
 - ALO determine during fighter check-in brief (approx 10 minutes from TOT) if overflight is necessary due to payload and recommends hinged or unhinged ACA.
- Use the Reinforcing BN CDR’s Counterfire Acquisitions in the CAS Battle Drill

BCT attacks MRB in Defense



ACA ORIOLES

ACA RAVENS

ACA OWL North

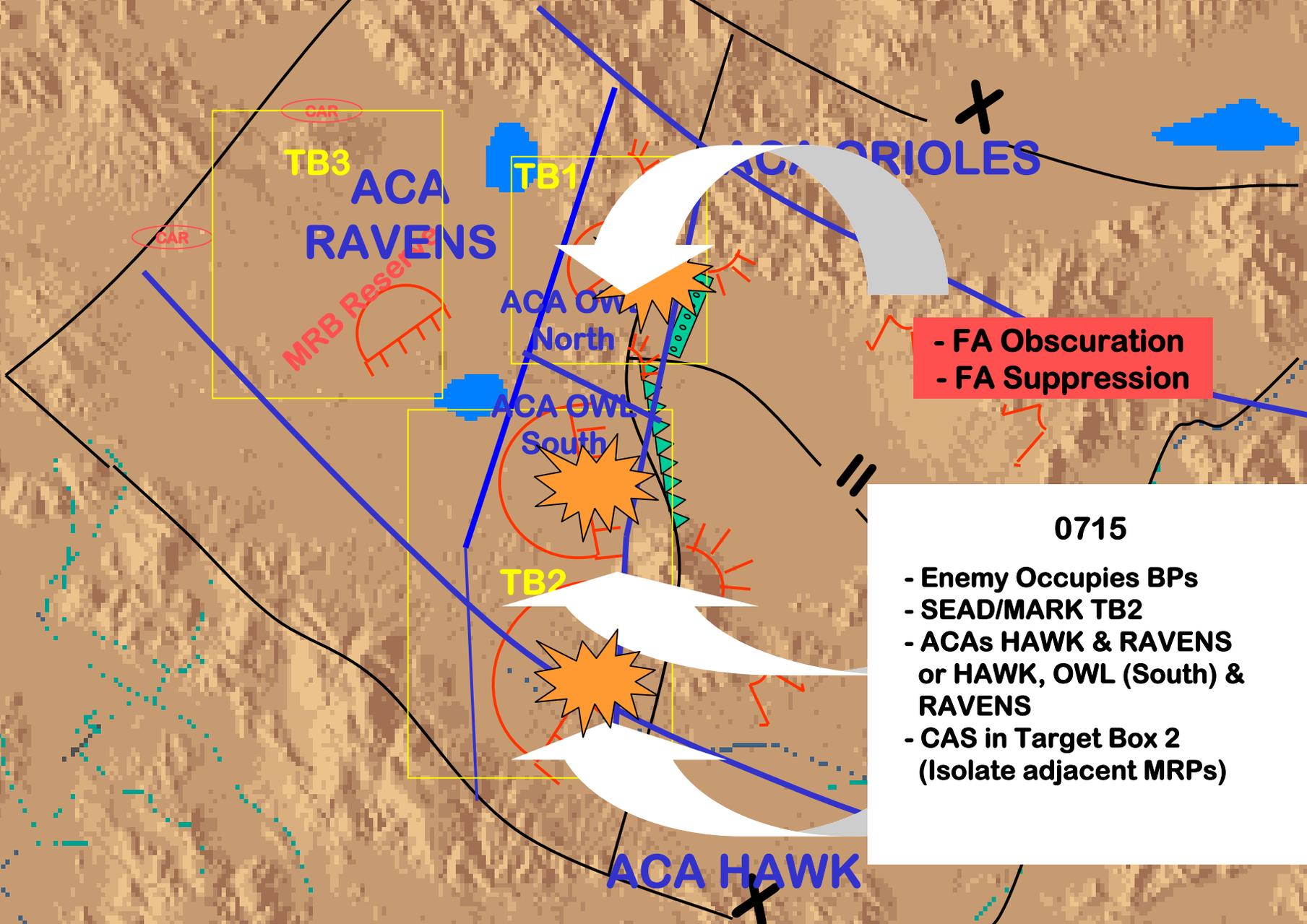
ACA OWL South

ACA HAWK

0630-0715

- FA Prep entire OBJ area
- SEAD/MARK TB1
- ACAs ORIOLES and RAVENS or ORIOLES, RAVENS and OWL(N) (Lateral Separation with hinge for overflight) **OWL(N) requires Prep target deconfliction**
- CAS in Target Box 1 (POP)

BCT attacks MRB in Defense

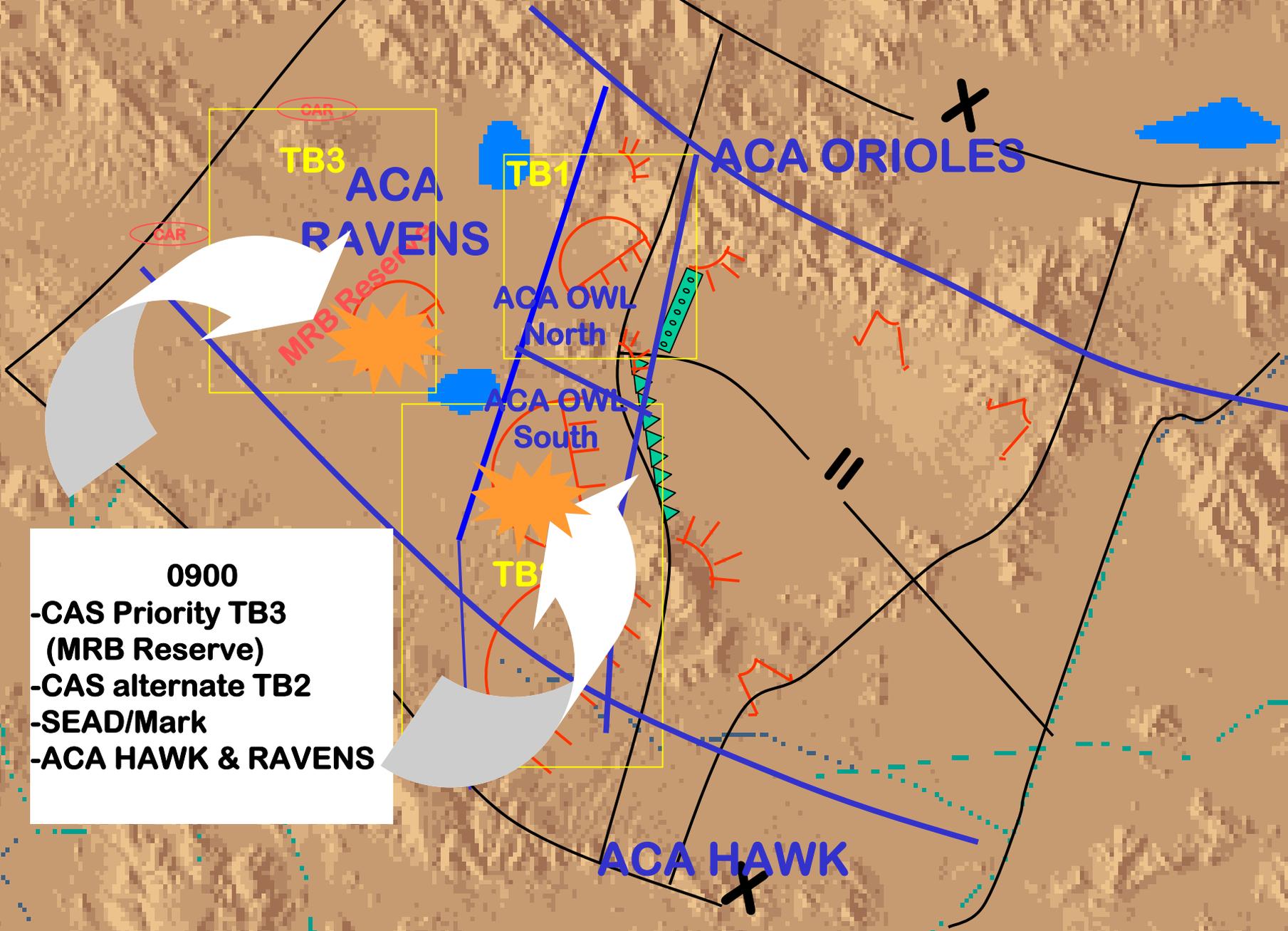


- FA Obscuration
- FA Suppression

0715

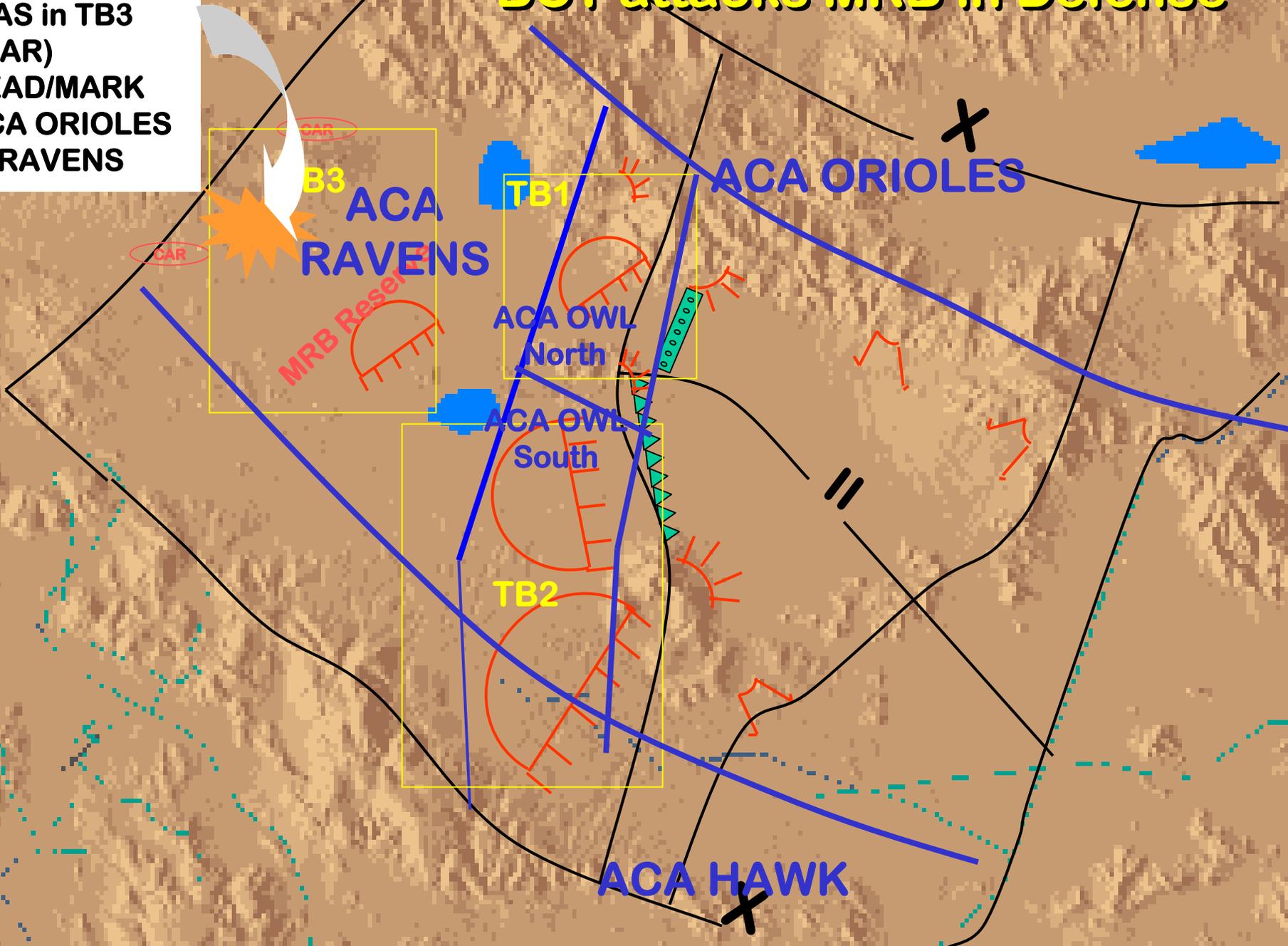
- Enemy Occupies BPs
- SEAD/MARK TB2
- ACAs HAWK & RAVENS or HAWK, OWL (South) & RAVENS
- CAS in Target Box 2 (Isolate adjacent MRPs)

BCT attacks MRB in Defense



BCT attacks MRB in Defense

- 1130
- CAS in TB3 (CAR)
- SEAD/MARK
- ACA ORIOLES & RAVENS





Trends/Fixes



Trends.... In the Defense

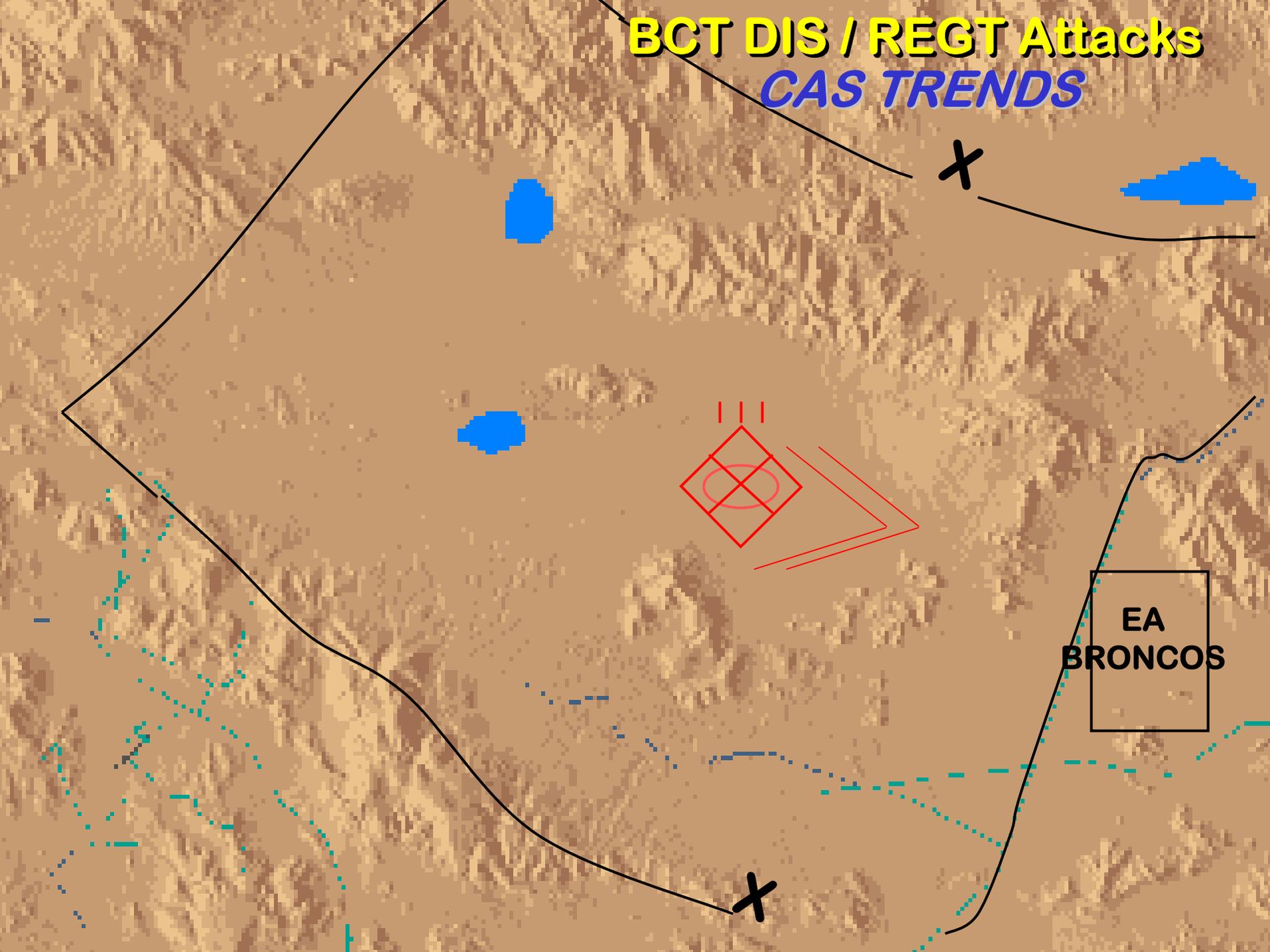
- ACAs not tied to Terrain, Enemy, nor Targets
- CAS Battledrill ineffective for CAS hand-off from BDE to Task Force (Deep to Close when 2nd Echelon is no longer deep)
- ETACs not positioned for positive direct control when CAS is handed off from BDE to Task Force

“The Result...”

- Shut down artillery in the few areas it could be effective
 - choke points, planned targets covering obstacles
- Task forces unable to mass both indirect fire and CAS in EAs when BCT deep fight is over
- Unused Air Force ordnance

BCT DIS / REGT Attacks

CAS TRENDS



BCT DIS / REGT Attacks

CAS TRENDS

TREND

ACAs not tied to Terrain,
Enemy, and Targets

(Large ACAs that blanket choke points
targeted with artillery in AMC status)

PROBLEM

Artillery is shut down in the passes

RESULT

Not maximizing both systems

ACA
CHUNK

TB1

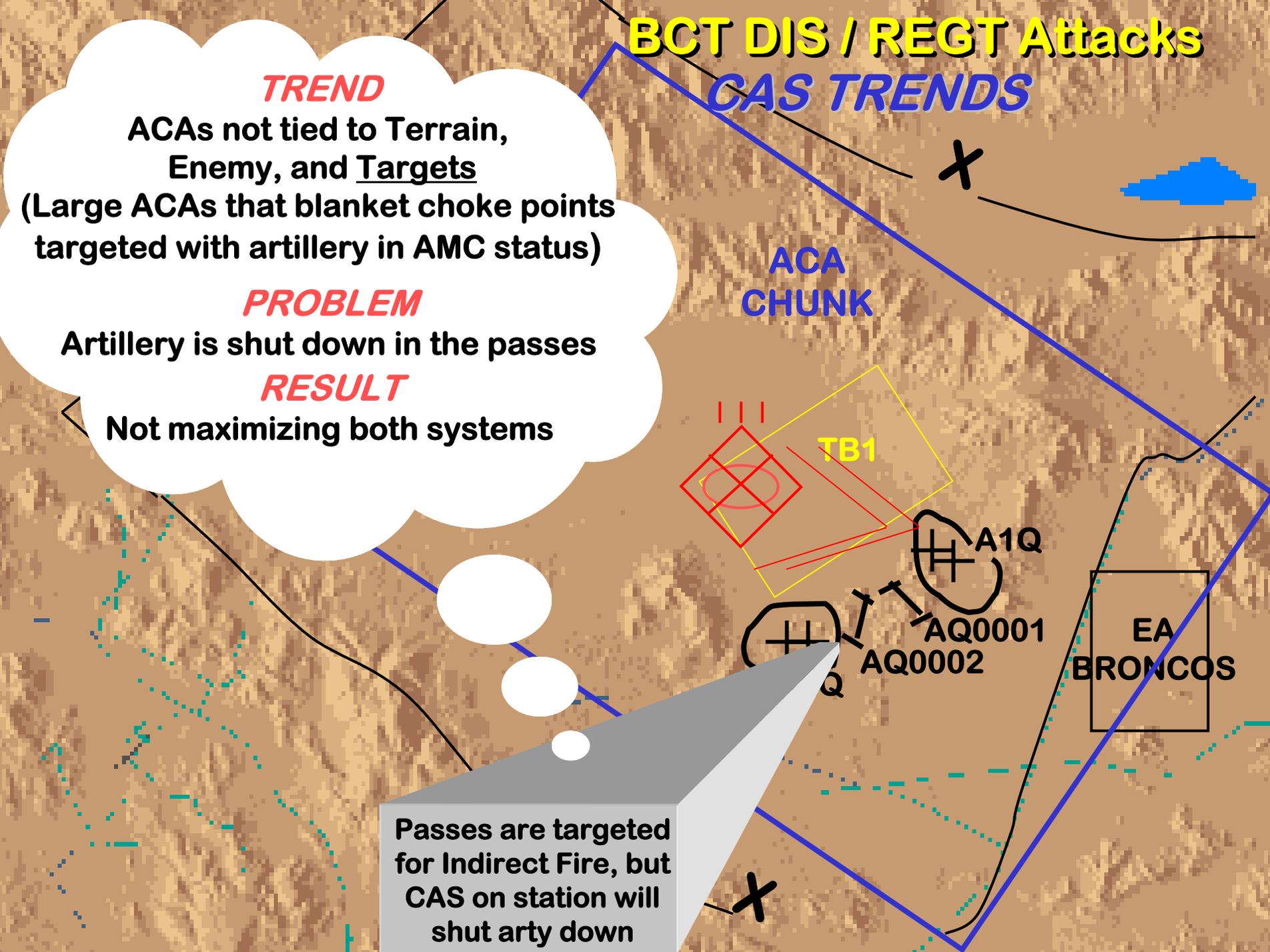
A1Q

AQ0001

AQ0002

EA
BRONCOS

Passes are targeted
for Indirect Fire, but
CAS on station will
shut arty down



BCT DIS / REGT Attacks

CAS TRENDS

TREND

BDEs struggle handing CAS off to Task Forces

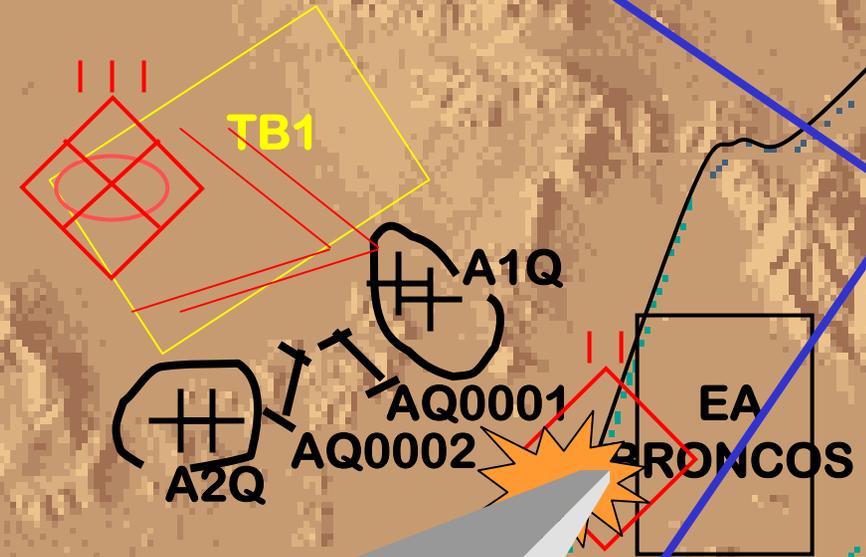
PROBLEM

Hand-off unrehearsed
ETACs can't see MBA

RESULT

Unused Ordnance
Shut down Arty/mort

ACA
CHUNK



2nd Echelon is
now in the close
fight



Trends/Fixes



FIXES.... In the Defense

- ACA Design

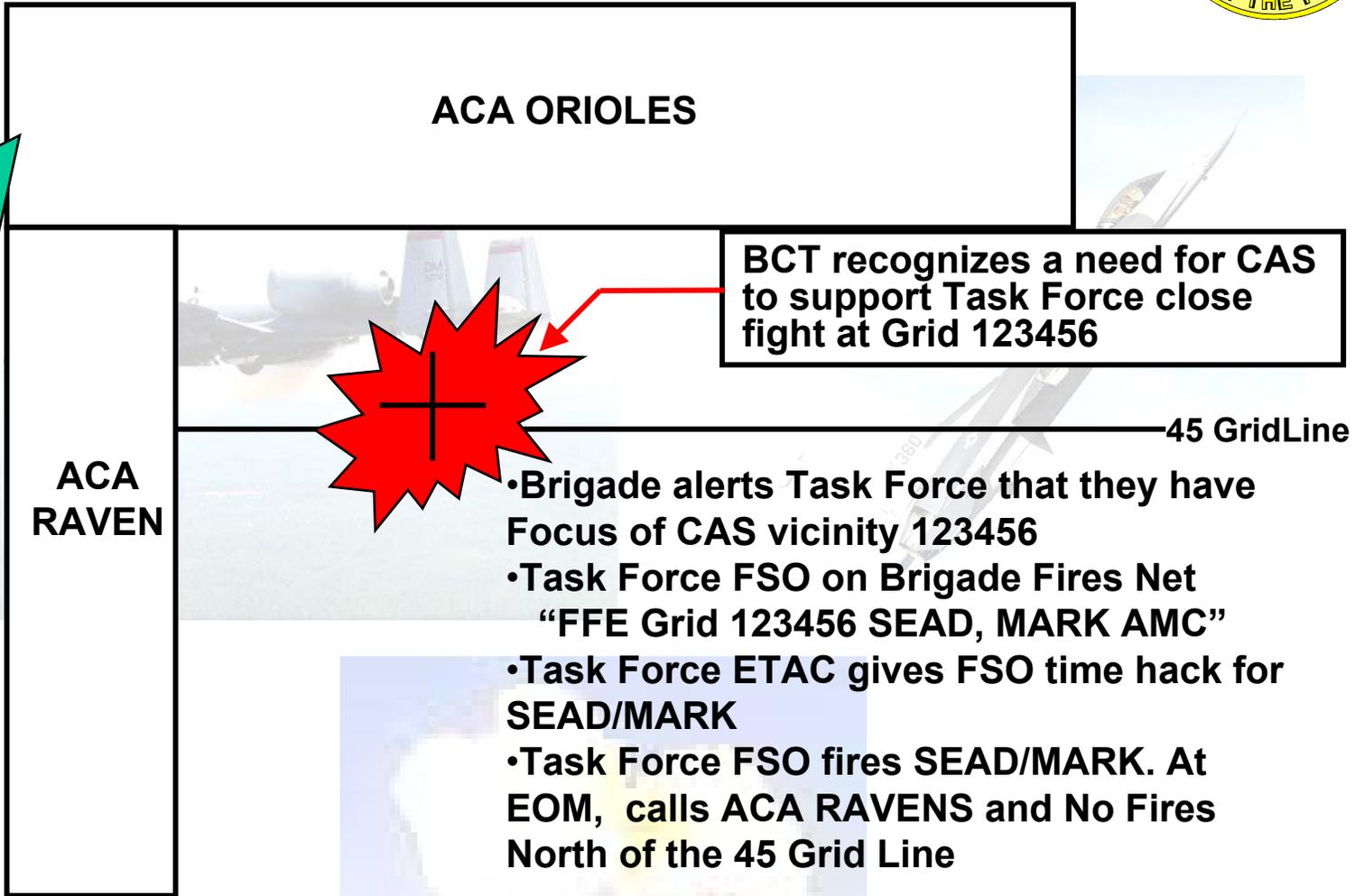
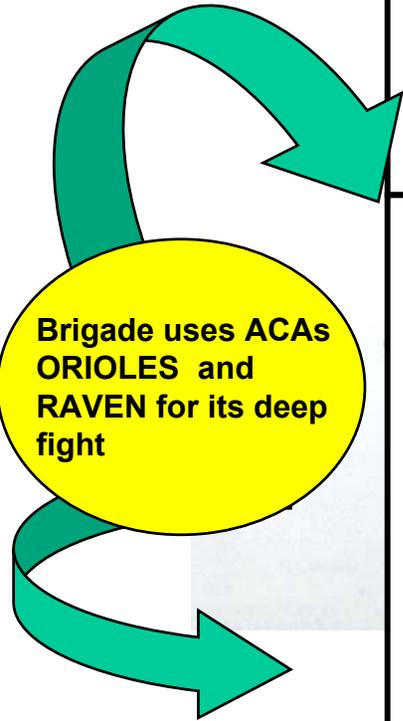
- 4 K ingress-egress on Supporting Effort flank
- Large attack ACA planned to the forward edge (but not covering) of targeted choke points
- CAS on large formations in open terrain waiting to file in a pass
- Strikers get Howitzers layed “AMC” on targets in choke points

- Hand-off to Task Forces when 2nd Echelon approaches TF sector

- ETACs in position to observe
- Combination of Bde planned ingress ACA with a “No Fires (Cardinal direction) of Gridline X” picked by the Task Force



BRIGADE TO TASK FORCE CAS HAND-OFF TECHNIQUE



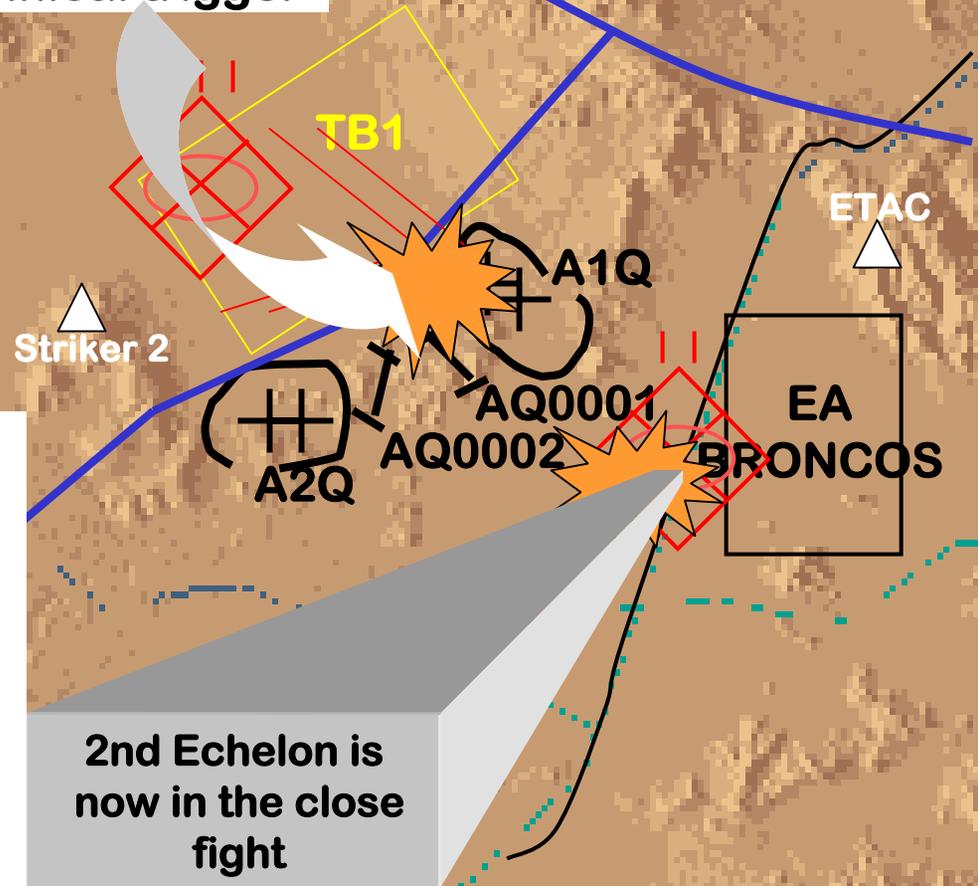
ENDSTATE: The combination of using the Brigade planned ingress ACA and an informal No Fires (east, west, north, or south ACA) allows Simultaneous attack using CAS stand-off and indirect fire

BCT DIS / REGT Attacks

- Striker 1 Fires FFE SEAD/Mark AMCin TB1 (positive indirect control)
- ACA ORIOLES and EAGLE in effect, CAS in TB 1 can also use stand-off to engage in the passes (simo with arty)
- Striker 2 lays guns on the appropriate pass (At My Command) and watches his technical trigger

ACA EAGLE

ACA ORIOLES



- BDE hands off CAS to TF responsible for EA BRONCOS
- ETACs with TF provide positive direct control.
- SEAD/Mark fired AMC, ACA Orioles and No Fires (cardinal direction) of Gridline X ACA established

2nd Echelon is now in the close fight



CAS BATTLEDRILL TECHNIQUE

Time relative to CAS at the IP (H-Hour):

TIME	ACTION	WHO
H - 20 Minutes	Aircraft enroute to IP, confirm number of aircraft and type of munitions	ALO
H - 19 Minutes	Informal targeting meeting	BDE XO, FSO, ALO, S2
	Number of aircraft, munitions, and time on station	ALO
	Enemy disposition in 20 minutes	S2
	Recommend location and targets to attack based on EFSTs or current situation	FSO
	Decide on formation or target(s) to attack	BDE XO
H-15 Minutes	WARNO to FDC (DS or R) for SEAD/Mark mission and ACA aircraft will use	FSE
H-15 to H-10 Minutes	In-brief FAC(A) or fighters	ALO
H-5 Minutes	SEAD/Mark mission issued AMC to FDC (DS or R) [Tactical Trigger]	FSO
H-5 to H-1 Minutes	9 Line to fighters	ALO
H - Hour or designated distance from CTB	Fire SEAD/Mark and activate ACA(s) [Technical Trigger]	FSO
	Lay DS and/or R Battalion on next target or targets during CAS attack	FSO





High War Considerations “A Technique”

- Air Force flies above 10000 feet MSL (Mean Sea Level)
- Artillery and mortar max altitude below 10000 MSL

Reminder: Air Force uses MSL in feet

Army uses Above Ground Level (AGL) in meters

High WAR PROs

- Deconfliction is simplified

High WAR CONs

- CEA (average miss distance) increased
 - Free fall munitions
 - Guns
- ID of target characteristics degraded
- Artillery Range shortened
- Arty QE limited to a max (400-500 mils)

High War Considerations “A Technique”



10,000 Feet MSL

...THEREFORE

7,500 Feet or (2,285 Meters AGL for artillerymen)
is the usable air space for artillery and mortars



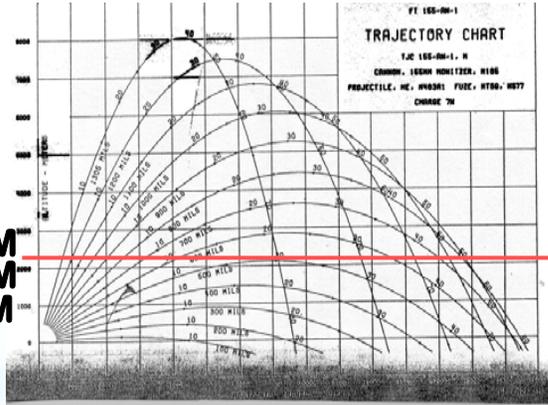
Above Ground Level

AGL = 2,500 feet MSL

MEAN Sea Level (in feet)

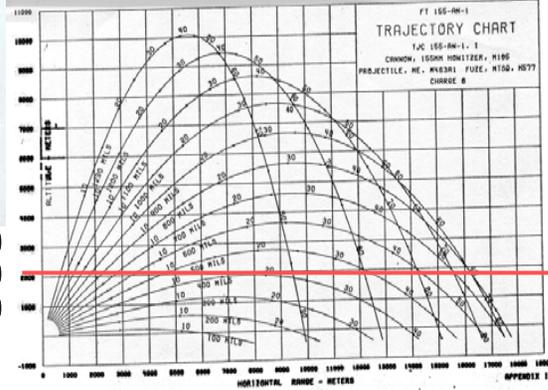


High War Considerations "A Technique"



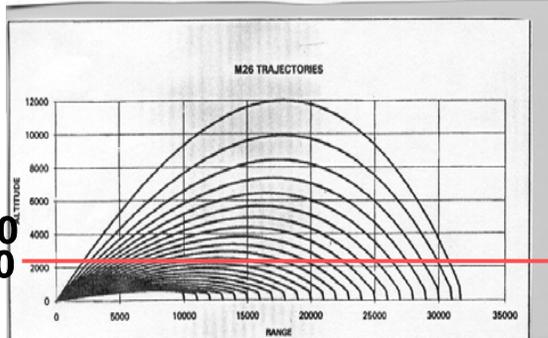
**155MM
7W**

**3000M
2000M
1000M**



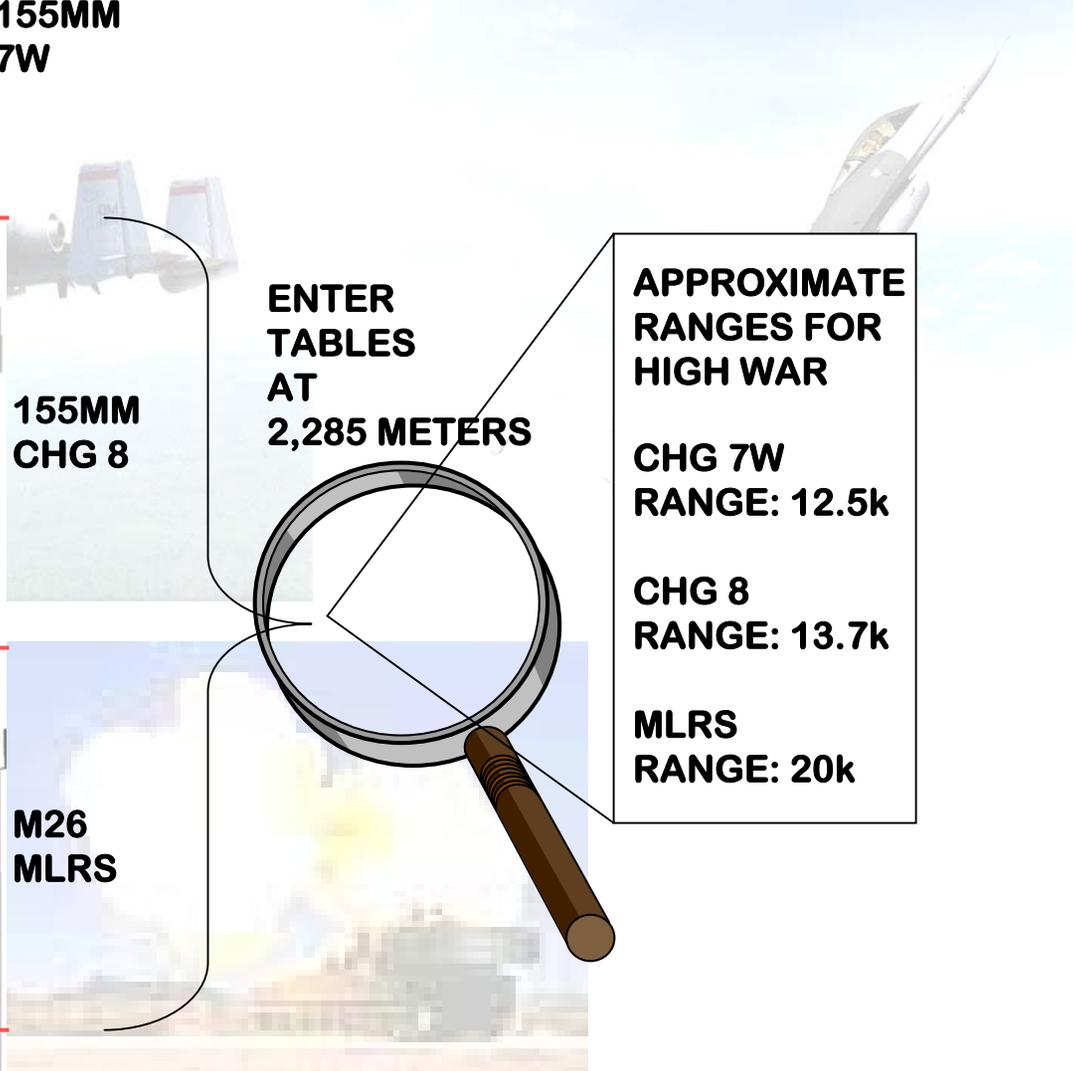
**155MM
CHG 8**

**3000
2000
1000**



**M26
MLRS**

**4000
2000**



**ENTER
TABLES
AT
2,285 METERS**

**APPROXIMATE
RANGES FOR
HIGH WAR**

**CHG 7W
RANGE: 12.5k**

**CHG 8
RANGE: 13.7k**

**MLRS
RANGE: 20k**



ADDITIONAL TIPS FOR CAS SUCCESS

- **Commander's guidance for fire support** encompasses cannon, CAS, IEW, and rockets, i.e., no need for separate guidance for CAS.
 - CDR gives effects-based guidance. Staff recommends delivery systems
- **SEAD** is not an EFST. It is part of "Method" of a larger EFST
- Rehearse **Hand-off of CAS from BDE to Task Force** during DIS CAR
- **Task Forces position ETACs** for Defensive operations
- **S3 Airs fill out 1972s during COA development** and submit thru Army channels IOT influence ATO cycle





ADDITIONAL TIPS FOR CAS SUCCESS

.... At Home Station

- Train S3 Airs on the 1972/JFCC IOT effect the ATO
- Practice SEAD/Mark Drill from FSO “FFE, Grid 123456, SEAD/Mark AMC” to Battery FDC reporting “Ready” at every opportunity with or w/o CAS
- Know how long it takes and when to initiate SEAD/Mark in the CAS Battle Drill
- Practice ACAs
 - Build /disseminate down to mortar FDCs, Btry FDCs
 - Practice activating/deactivating and getting acknowledgements
 - Practice CAS hand-offs from BDE deep to TF close

Include in
Janus,
Warfighters,

Ramp-ups,
Company
thru
BDE Lanes



QUESTIONS???

