



# **Dynamic Targeting (DT) Brief**

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# Scope



- XCT 24 DT Objectives
- Overview
  - Target Type
  - Categories of DT Missions
  - DT Planning and Mission Flow
  - DT code words and 6-line brief
- DT Processes with AISR Assets
- Special Interest Items

# XCT 24 DT Objectives



- Exercise the intelligence processes within C2ISRC to provide real-time intelligence update for DT
- Exercise target hand-over between Air-ISR assets
- Drill the sense-to-strike processes and linkages in prosecuting DT

# Overview



- Dynamic Targets (DT) are **high value targets** with **fleeting opportunity** for engagement.
  - Initially classified as an Emerging Threat.
  - Re-classified as Dynamic Target once designated by the DT-MD as high priority.
- All LFEs comprise a DT mission involving the Fighters and AISR assets.

# Overview



- DT targets will be simulated by **mock-up** SCUD transport / launch vehicles.



Groundshot



IR Image



EO Image

# Categories of DT Missions



- Level 1
  - Handover of single moving target for DT
- Level 2
  - Two moving targets in convoy (split)
    - Handover of one target to another AISR platform
  - Sequential / concurrent DT for both targets
- Level 3
  - Two moving targets (different areas)
    - Redirection of AISR asset to a different area for F2T
  - Sequential / concurrent DT for both targets



# DT Processes

## Planning

- [D – 2] AOD Meeting
  - Intel White Cell and CECG will provide the DT scenario and target areas for each LFE
- [D – 1] IPC/FPC:
  - DT-MD and DT PC to be present to coordinate
  - Intel Mission Planner (from IMPC) will brief the intel scenario to facilitate the DT play
  - CIC will develop the DT target folder
  - Coordinate

# DT Processes



## Briefing

- [D - 0] LFE Briefing:
  - DT PC to minimally brief the following:
    - DT assets (AISR platforms and fighters)
    - Promulgated DT code words
    - DT Killboxes, airspace and de-confliction plan
    - DT fighters holding areas
    - Targeting profile





# DT Code Words

Code Words	Remarks
QUICKDRAW	<ul style="list-style-type: none"><li>Pre-assigned DT fighter assets <b>tasked to re-role</b> for DT mission.<ul style="list-style-type: none"><li>track towards pre-designated DT holding area</li><li>switch to DT frequency as soon as practical</li></ul></li></ul> <p>[<u>Note</u>: QUICKDRAW does not activate KILLBOX airspace]</p>
KILLBOX	Denotes the <b>DT airspace that will be activated</b> . The code word KILLBOX will be followed by the designated airspace activated (eg. KILLBOX "Charlie")
RED MONKEY	Terminate DT operations for all DT players, but KILLBOX will continue to be <u>active</u>
TOUCHDOWN	DT operations stood down <u>and</u> KILLBOX is deactivated

For any emergency or flight safety issues, DT players can call "Terminate" or "Knock-It-Off"

# 6-Line Brief

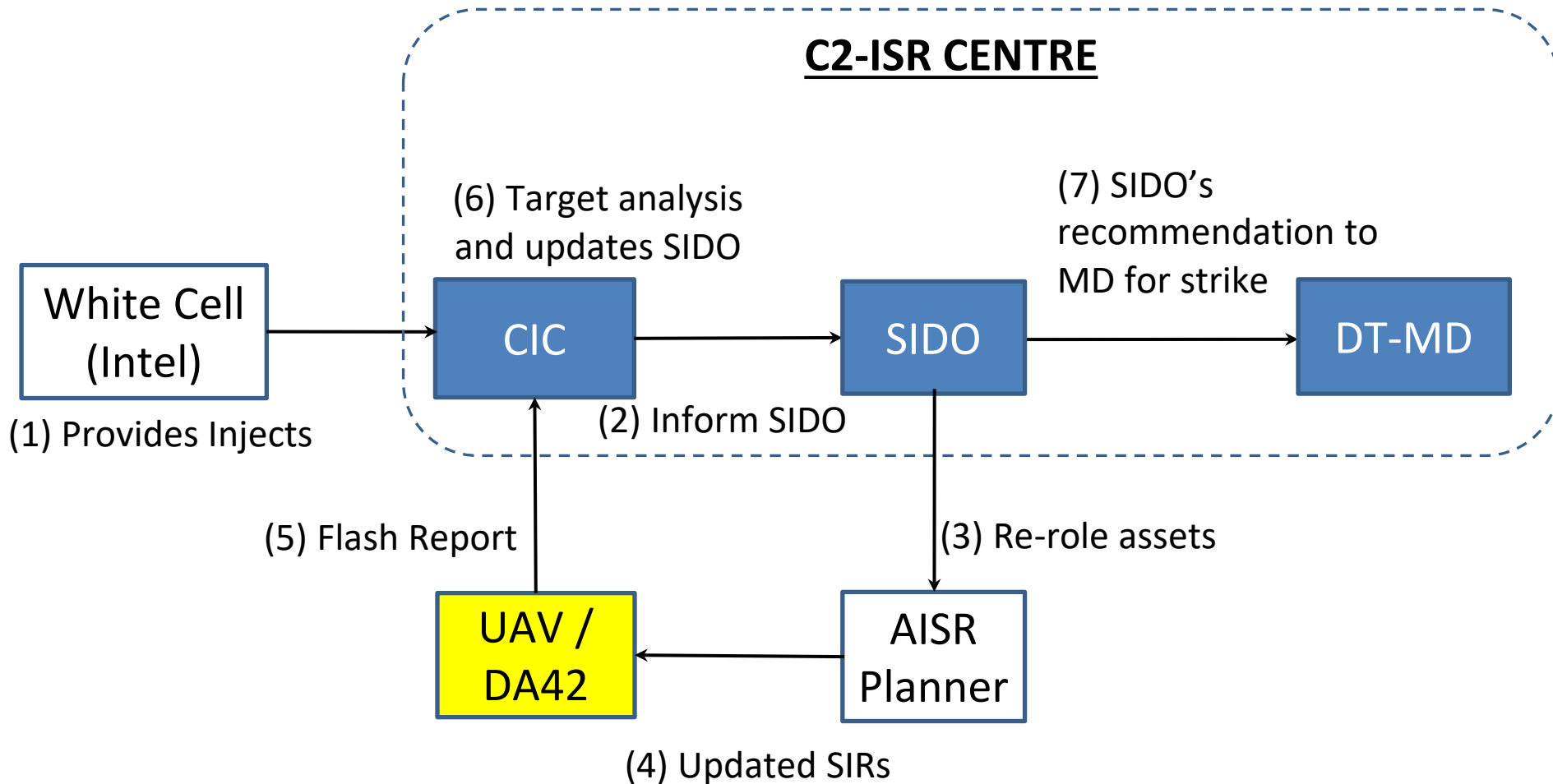


DT Brief (6-Line)		
<u>Line</u>	<u>Format</u>	<u>Remarks (for illustration)</u>
<b>A</b>	<b>Target Type and Numbers</b>	<i>“Two SCUD B launchers”</i>
<b>B*</b>	<b>Killbox A / B / C</b>	<i>“Killbox Charlie”</i>
<b>C*</b>	<b>Target Lat / Long / Elevation</b> <i>&lt;&lt;degree /minute / decimal and feet&gt;&gt;</i>	<i>“Nxx xx.xxx, Exxx xx.xxx”</i> <i>“xxx feet”</i>
<b>D</b>	Target Description and surrounding lead-in features. <<May include additional remarks if required>>	<i>“Target next to blue building, oriented northerly”</i>
<b>E</b>	<b>Ordnance Required</b>	<i>“2x MK82”</i>
<b>F*</b>	<b>Cleared to ID &amp; track / Engage</b> And <b>Location and Altitude of Supporting Air-ISR asset</b>	<i>“Cleared to engage, Aerostar at 8,000ft in Killbox Charlie”</i>
*DT aircraft lead to readback line B, C, and F.		

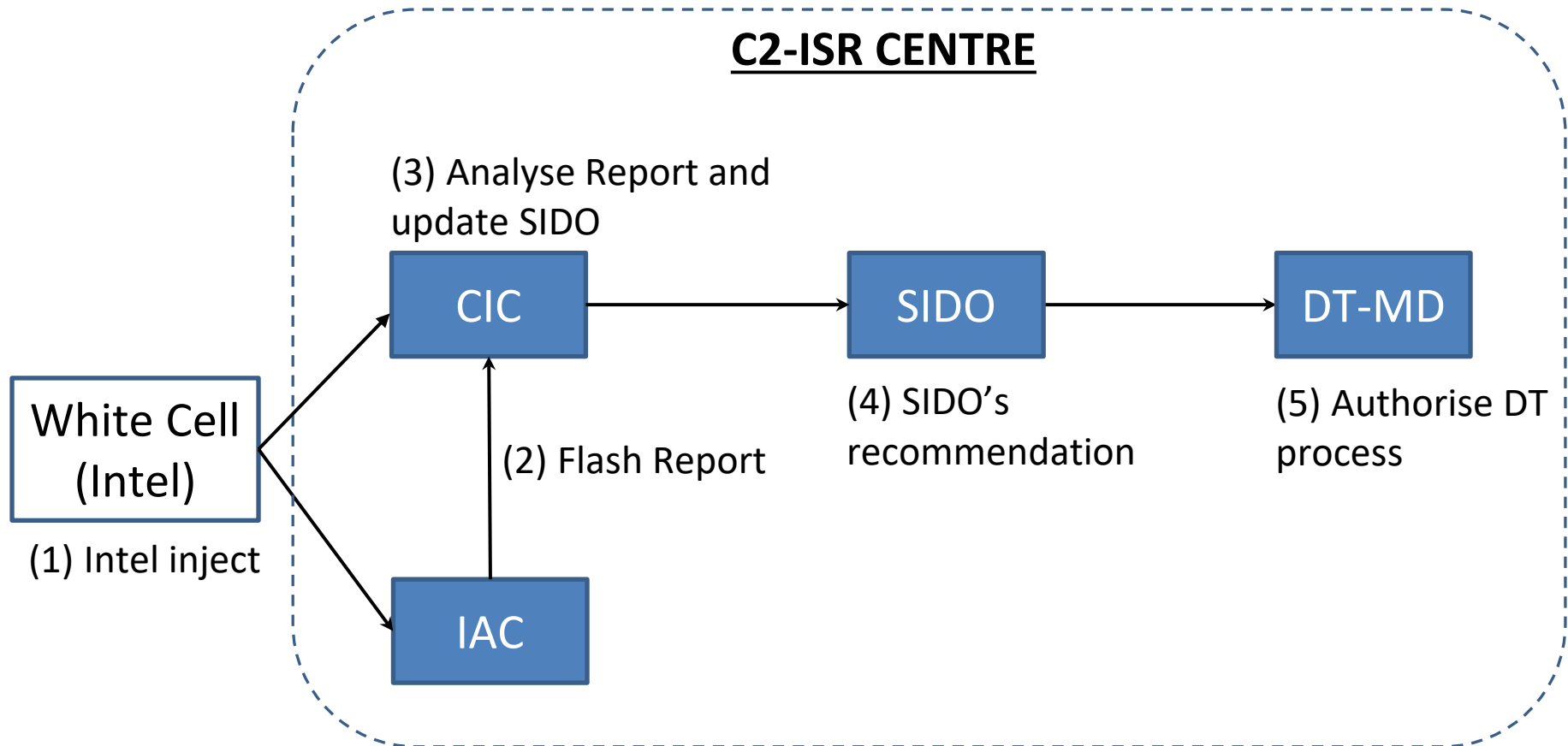
# DT Process with AISR Assets



## Upon target inject



# DT Process w/o AISR Assets



# DT with AISR Assets

# DT Airspaces / Killboxes



## Killbox A / B

- 18 x 18nm, over CYP and BSP
- Dimensions and altitude activated for each LFE to be determined by MD / DT-MD and stated in AOD

Killbox B



BSP

Killbox A



CYP

## Killbox C

- UC-3/5 boundaries
- SFC – 15,000 ft

Killbox C

MK

CH

UNCLASSIFIED



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# DT Airspaces / Killboxes



Killbox B



BSP

Killbox A



CYP

Killbox C

MK

CH

- **DT missions with DA-42 support** may be conducted in KILLBOX B and C
- **DT missions with Heron 1 or Aerostar support** can only be conducted in KILLBOX C

UNCLASSIFIED



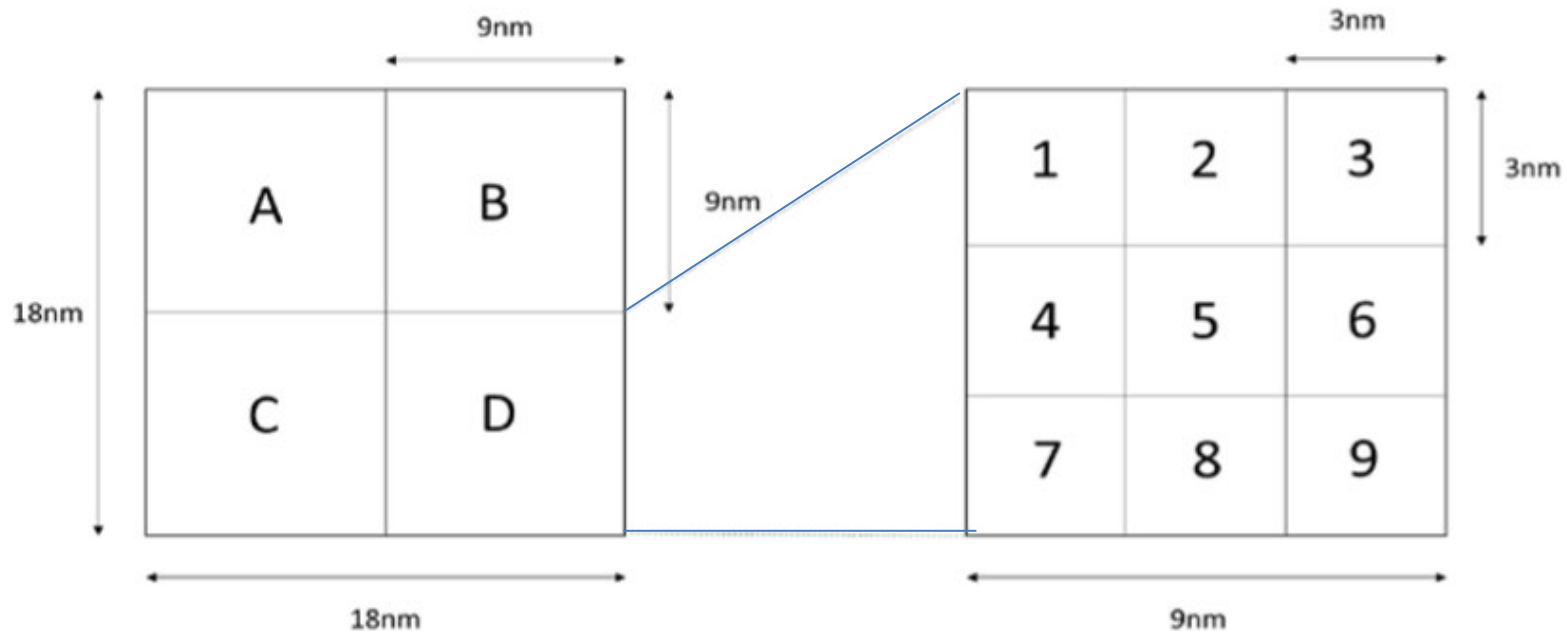
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# KILLBOX A and B



- If required to facilitate coordination between DT players, KILLBOX A and B can be sub-divided as follows:
  - For each KILLBOX, sub-divide into 2x2 grids
  - If required, further sub-divide into 3x3 grids





# Deconfliction Options in KILLBOX C



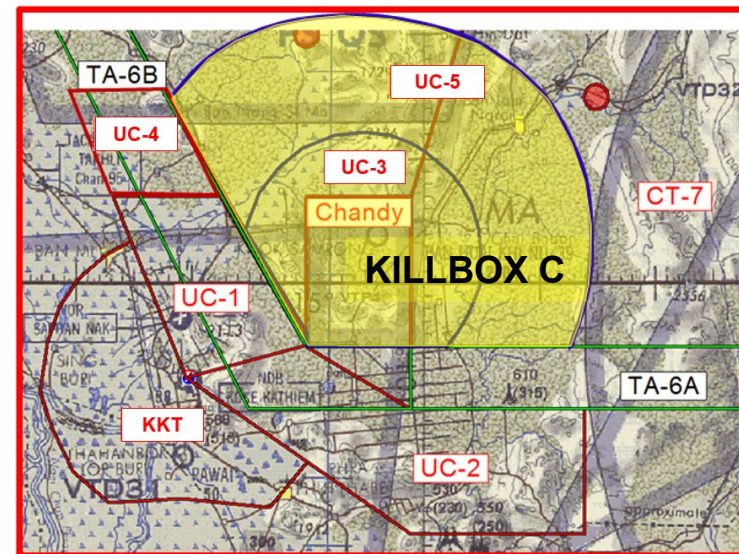
DT-MD and DT-PC may choose to exercise the following deconfliction options during Planning Conferences:

## 1. Altitude Deconfliction

- AISR assets may operate in UC-3/5 during each LFE (ie. *Before activation of KILLBOX C / when KILLBOX C is activated*)
- The following altitude blocks apply for concurrent ops between DT and AISR assets in KILLBOX C.

Aircraft	Altitude	Remarks
OCA (Strike) / DT	13k – 14kft	
<b>AISR Assets</b>	<b>6k – 11kft</b>	DCA utilising 6,000 – 9,000ft to keep clear of UC-3/5
OCA (Strike) / DT	SFC – 4kft	

\* *Provides at least 2000ft separation between manned-unmanned aircraft.*

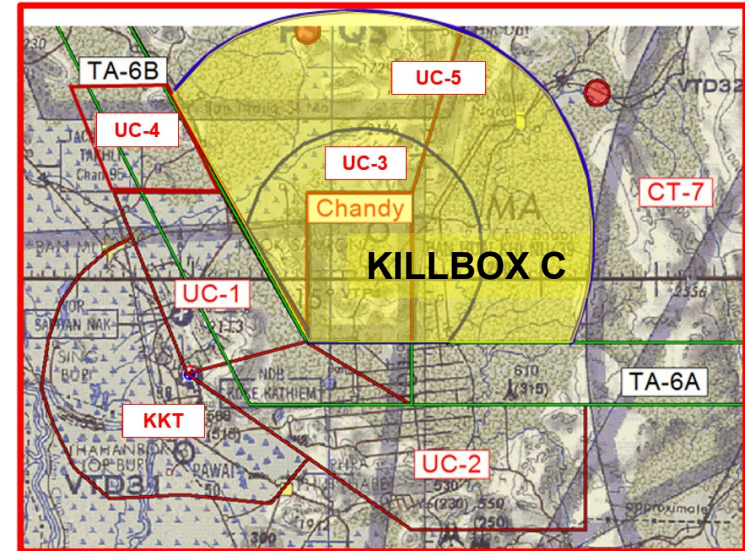


# Deconfliction Options in KILLBOX C



## 2. Time Deconfliction

- AISR assets to hold in UC-1, 2 and 4 during OCA (Strike) windows, and **enter KILLBOX C only upon activation.**
- Not preferred, since AISR assets would not be in optimal profile to conduct search while outside KILLBOX C.

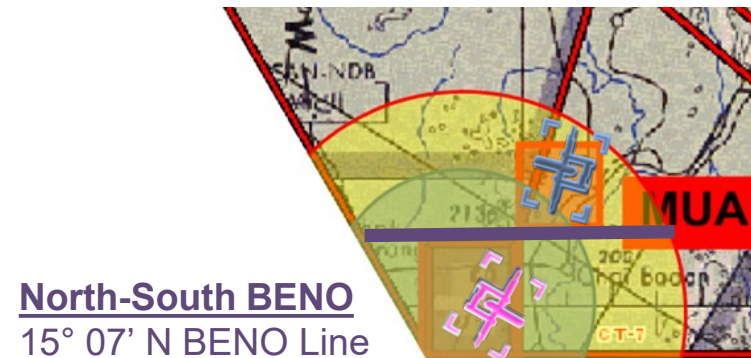
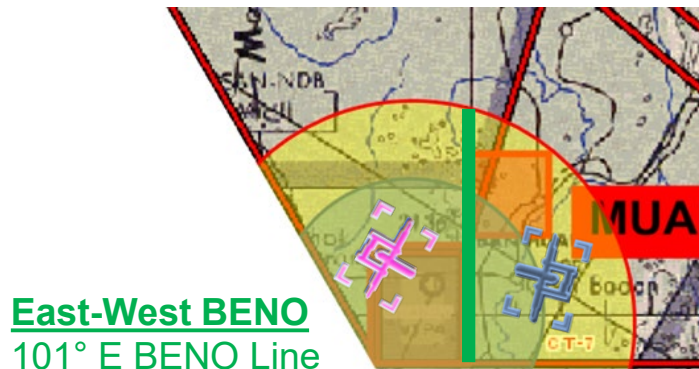


# Deconfliction Options in KILLBOX C



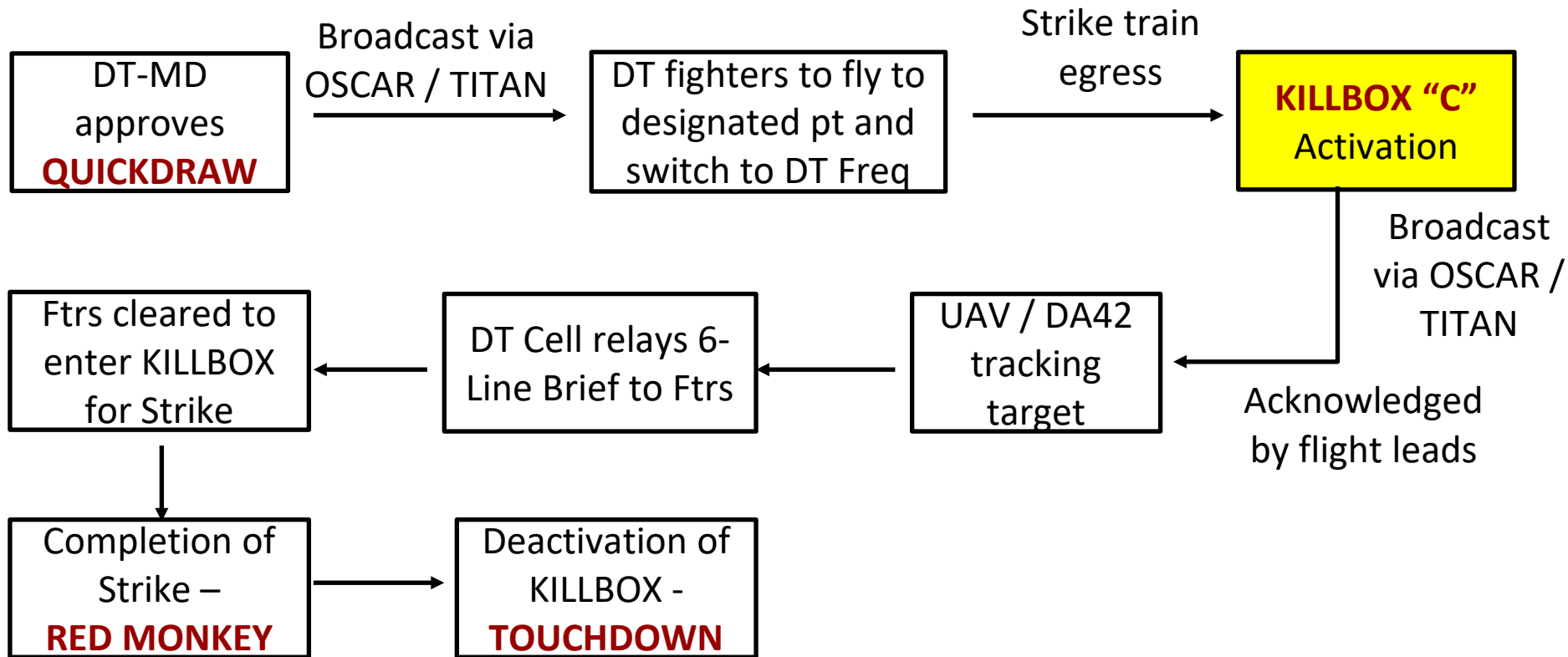
## 3. BENO Deconfliction

- Allows one AISR asset to conduct search over CH and MK each, if altitude deconfliction (2000ft) cannot be maintained.



Concurrent Ops	Separation norms	For EW BENO option, use:	For NS BENO option, use:
DA-42 / UAV	5nm lateral separation (2.5nm each side of BENO)	100° 57' E <u>and</u> 101° 3' E	15° 10' N <u>and</u> 15° 4' N
Heron 1 / Aerostar	1km lateral separation (500m each side of BENO)	100° 59.5' E <u>and</u> 101° 0.5 E	15° 7.5' N <u>and</u> 15° 6.5' N

# DT Process with AISR Assets



## Note:

- (1) Killbox to be activated only after last Strike package to CHANDY /MK egress
- (2) Last Strike Formation to CHANDY / MK to call "MILLER TIME"
- (3) DT-MD may choose to relay 6-line brief before activating KILLBOX.

# DT Mission Scenario Example

DT Level 1 (Single Moving Target)



# Example – DT Level 1



## *Current situation*

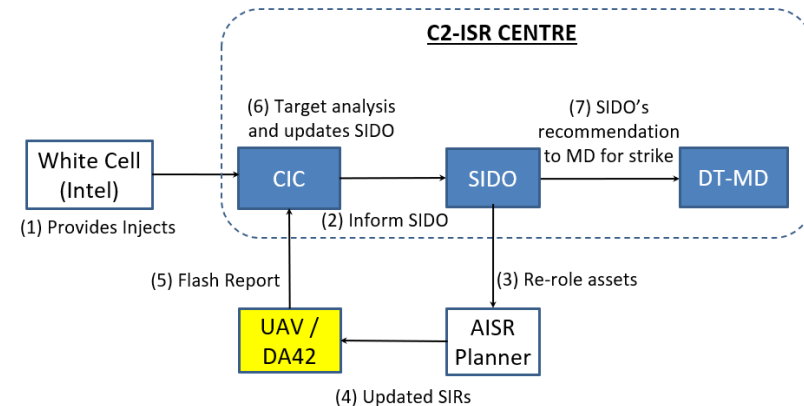
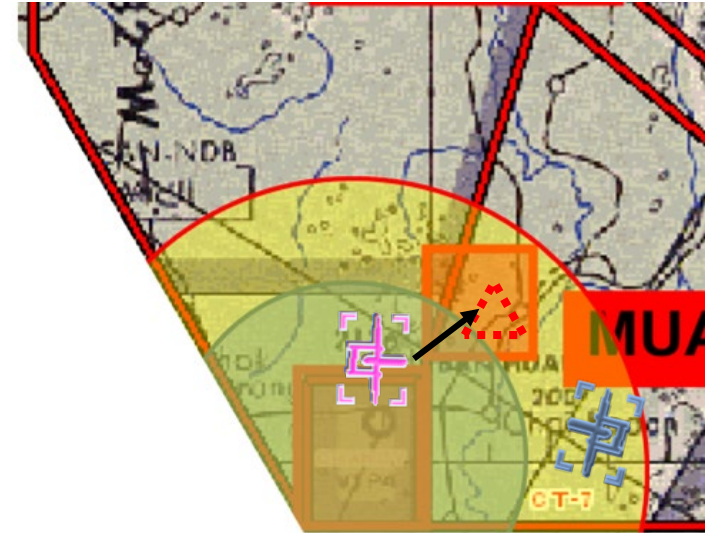
- **AISR asset 1** and **AISR asset 2** are in KILLBOX C. **AISR 1** is currently tasked to search for a moving target in MK.

## *Inject arrives*

- White cell provides CIC with target inject at CHANDY (CH).
- CIC generates and clears the EEIs / SIRs with SIDO.
- SIDO relays the information to the AISR planner.

## *Re-role / Target handover*

- As AISR 1 is closest to target in CH, AISR planner re-roles AISR 1 to CH, and tasks the search in MK to AISR 2.
- AISR 1 hands over the search in MK to AISR 2 through the AISR Planner.



# Example – DT Level 1

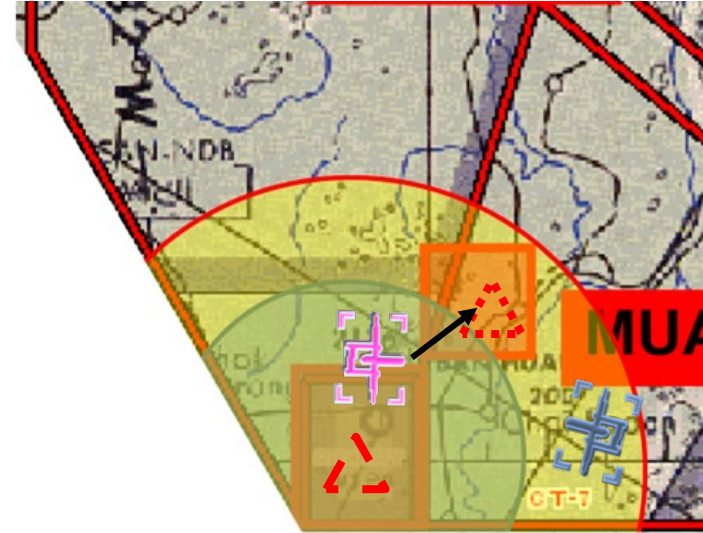


## Current situation

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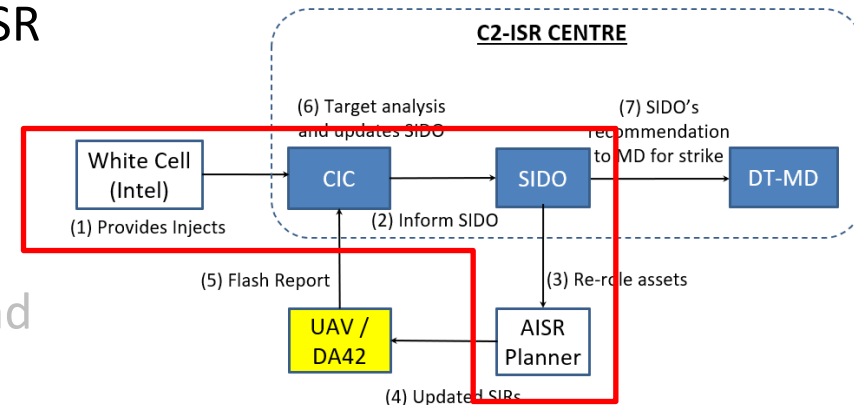
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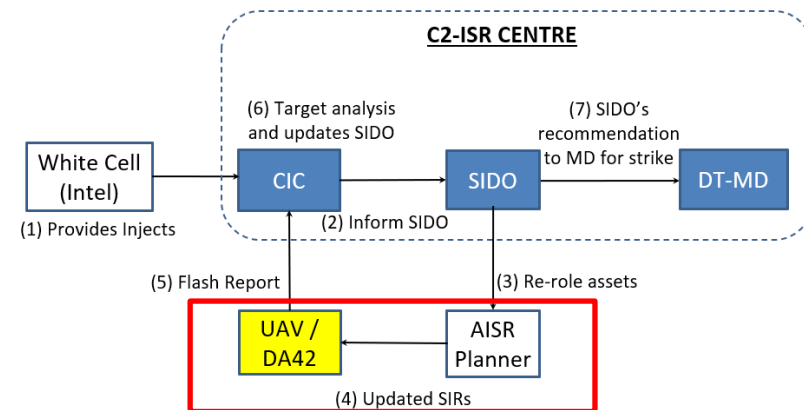
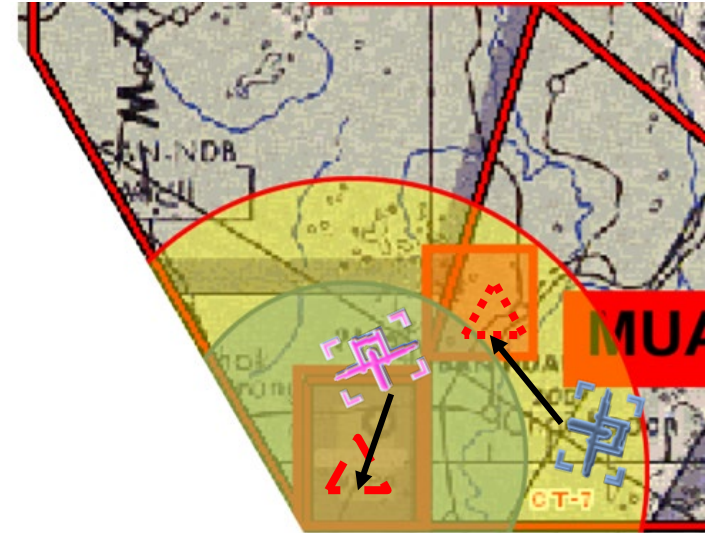
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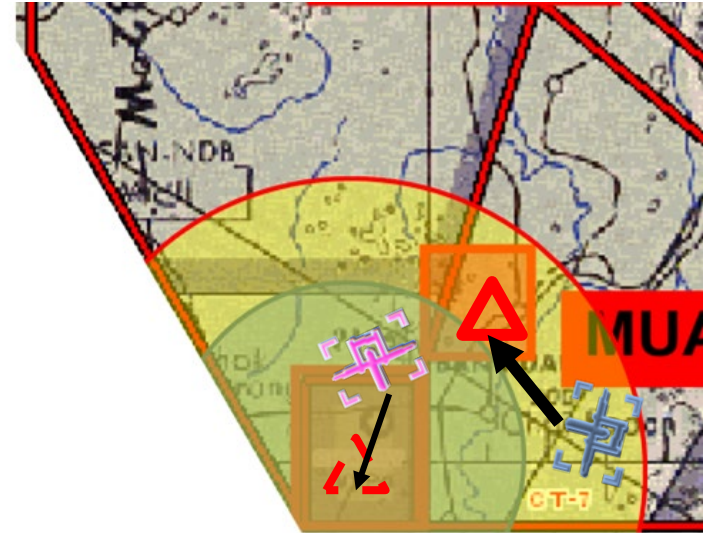


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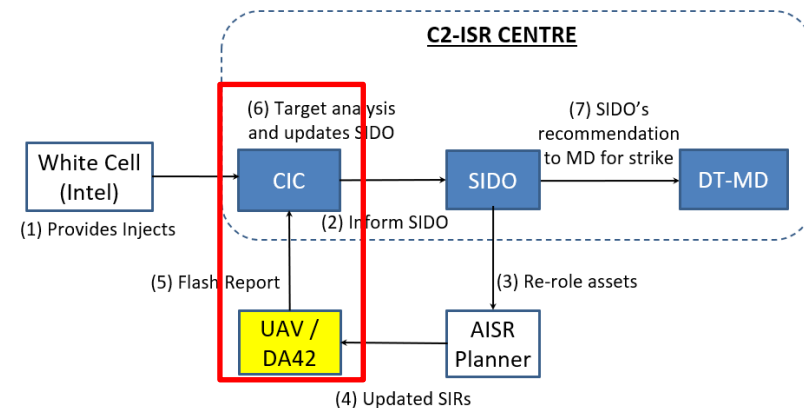
## *Target of interest found*

- **AISR 2** finds a target of interest.
- Pilot provides a flash report to CIC (through IAC and AISR Planner).
- CIC analyses the report by correlating with other FMV and intel sources.



## *Target classified as Emerging Target*

- CIC to update SIDO if it assesses that the target is a potential **emerging target**.
- SIDO to verify that it is a high priority target per the AOD.
- SIDO provides recommendation to DT-MD for strike.

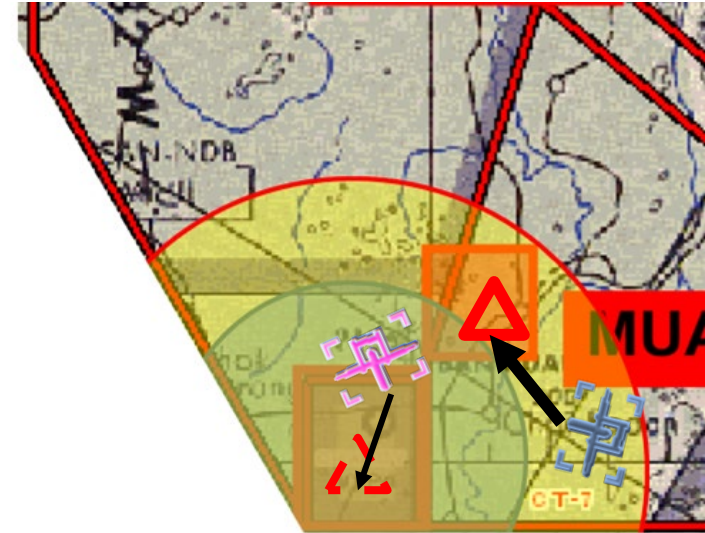


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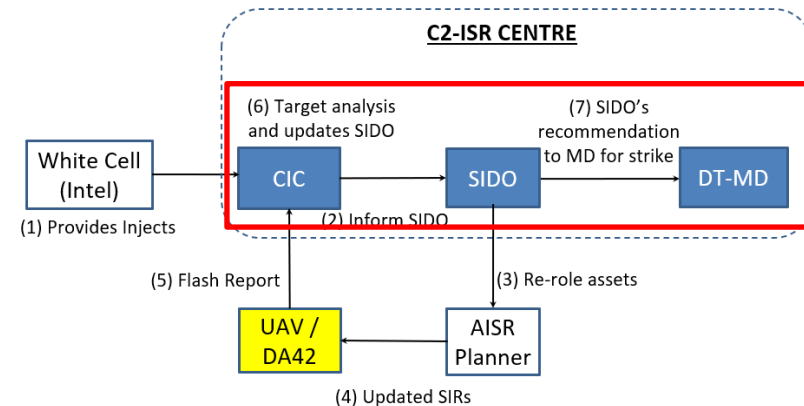
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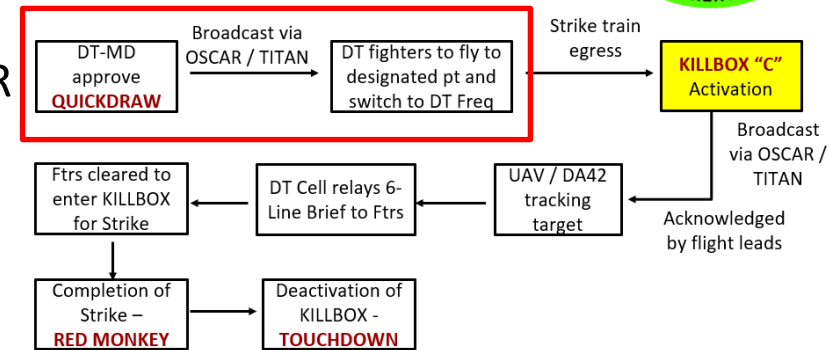


# Example – DT Level 1



## *DT mission approved*

- DT-MD announces QUICKDRAW via OSCAR / TITAN.
- DT fighters to fly to designated point and switch to DT frequency.
- DT Cell starts to develop 6-line brief

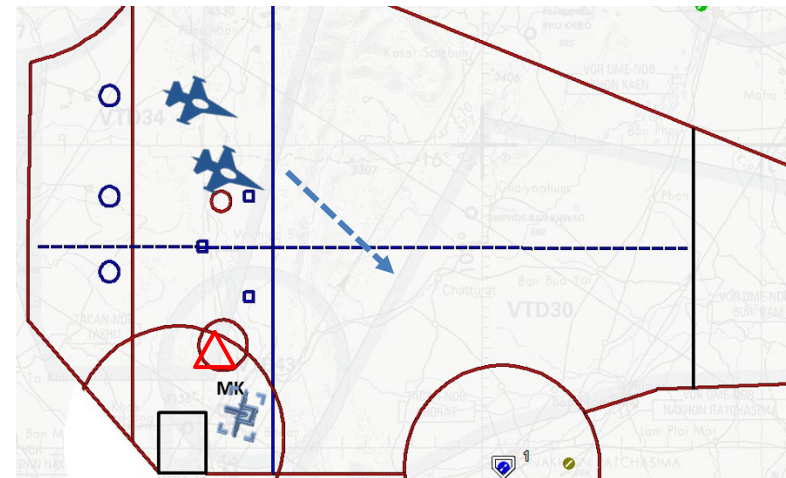


## *After "MILLER Time"*

- DT-MD announces KILLBOX C activation. RED Air must keep clear of KILLBOX Airspace.
- DT Cell relays 6-line brief to fighters.
- Fighters cleared to strike with positive identification of target.

## *Strike completed*

- DT Flight lead to relay Level 1 BDA back to DT Cell.
- DT-MD announces RED MONKEY – DT mission terminated, but KILLBOX remains active until TOUCHDOWN announced.



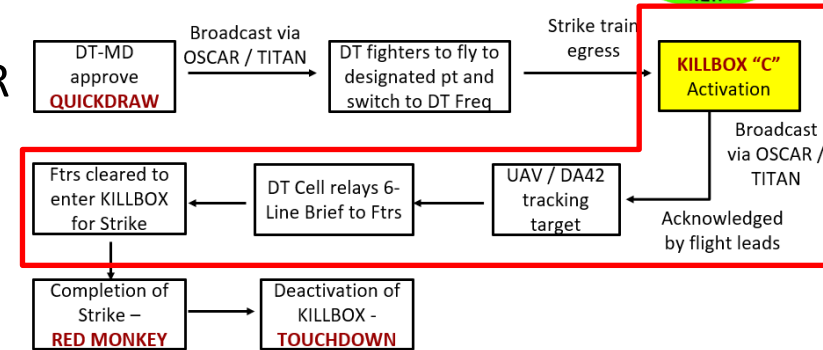
Note: AISR asset between 6 – 11k ft in KILLBOX C

# Example – DT Level 1



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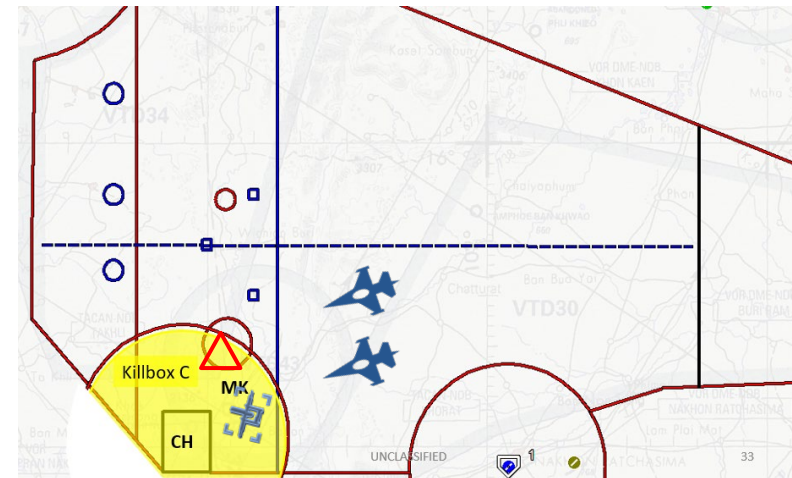


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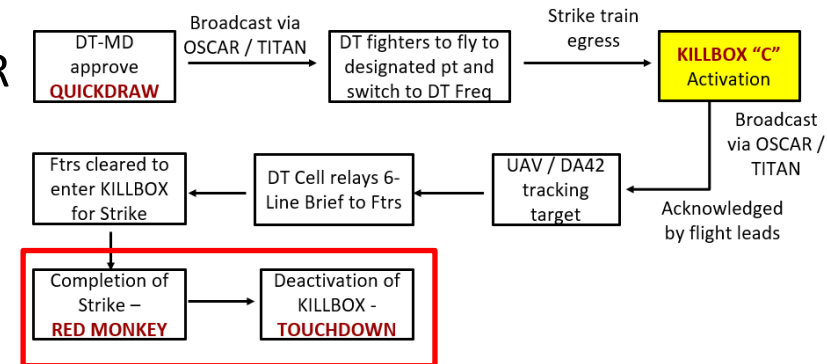
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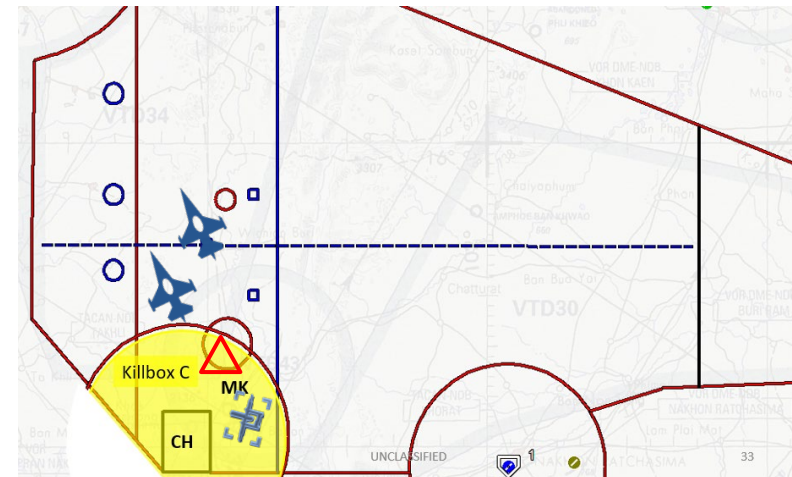


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# Comms Procedure



STK Ftrs	DT MD	DT Fighters	Freq.
<div> <div>↑</div> <div>"MILLER Time"</div> <div>↓</div> </div>			OCA Stk Freq (Orange 1/2)
	<u>After confirmation of target by SIDO:</u> "HORNET, EAGLE EYE, QUICKDRAW, QUICKDRAW, QUICKDRAW."		
		"EAGLE EYE, HORNET, QUICKDRAW acknowledged"  <i>Fly to pre-designated holding point</i>	
		"EAGLE EYE, HORNET on this frequency"	DT Freq (Grey 1/2)
	"HORNET, EAGLE EYE, standby for DT brief"		OSCAR / TITAN to relay Killbox Charlie activation to all players
	A. Two Scud B launchers. B. Killbox Charlie activated. C. Nxx xx.xxx, Exxx xx.xxx D. Target next to blue building, oriented northerly E. 2 x Mk82 F. Cleared to engage, UAV at 8000ft in Killbox Charlie		
		Readback lines B, C, F.	
	"Touchdown"		

# Special Interest Items



- Clear de-confliction plan required with AISR platforms, OCA and DCA aircraft
- KILLBOX to be activated after strikers have egressed from CHANDY / MK.
- When KILLBOX is activated, all non-participating aircraft to keep clear, including Red Air
  - Dimensions of Killbox must be briefed to all players during MD Brief



# Dynamic Targeting TTX





# TTX Discussion



## **Weather – AISR platform unable to maintain in assigned blocks**

### Recommended Actions

- AISR platform(s) to climb or descend, whilst maintaining vertical separation.
- If not possible, deconflict via the BENO line.
- If still not possible, AISR platform(s) to vacate UC-3/5. DT mission to proceed without AISR support if required.
- DT MD will make the call if there is a need for low / high war option for fighters.

# TTX Discussion



**Weather – Undercast Wx, causing Ftrs to be unable to locate target**

## Recommended Actions

- Fighters to call DT-MD (via DT frequency) if no positive identification of target.
- AISR platform to continue maintaining track of target.
- DT-MD to provide fighters with updated coordinates once target is stationary.
- DT-MD will clear the fighters for strike.

# TTX Discussion



## **AISR platform unable to F2T target**

### Recommended Actions

- White Cell will provide further updates to narrow search area for AISR platforms.
- At the pre-determined cut-off timing, the target coordinates will be passed to the DT-MD to activate QUICKDRAW, regardless if AISR platform has F2T target.
- DT mission to proceed without AISR support.

# TTX Discussion



## **Comms Contingency –DT-MD unable to contact Ftrs on DT Freq**

### Recommended Actions

- DT-MD will relay 6-Line Brief through OSCAR/TITAN or fighter's tact frequency
- If Ftrs unable to contact DT-MD, Ftrs will go back to previous frequency.
- If still unable to establish comms, Ftrs will flow through at cut-off timing to simulate DT strike.

# TTX Discussion



## UAV Contingency while in KILLBOX C

### Recommended Actions

- For **non-dire emergencies** (UAV pilot is able to maintain control of aircraft):
  - UAV with emergency to terminate and exit KILLBOX expeditiously
  - Inform Controller and DT-MD
  - **DT mission to proceed without AISR support.**
- For **dire emergencies** (ie. MAYDAY emergencies):
  - **DT mission to cease.** DT MD calls TOUCHDOWN on common frequency.
  - DA-42 and DT fighters to deconflict as required

