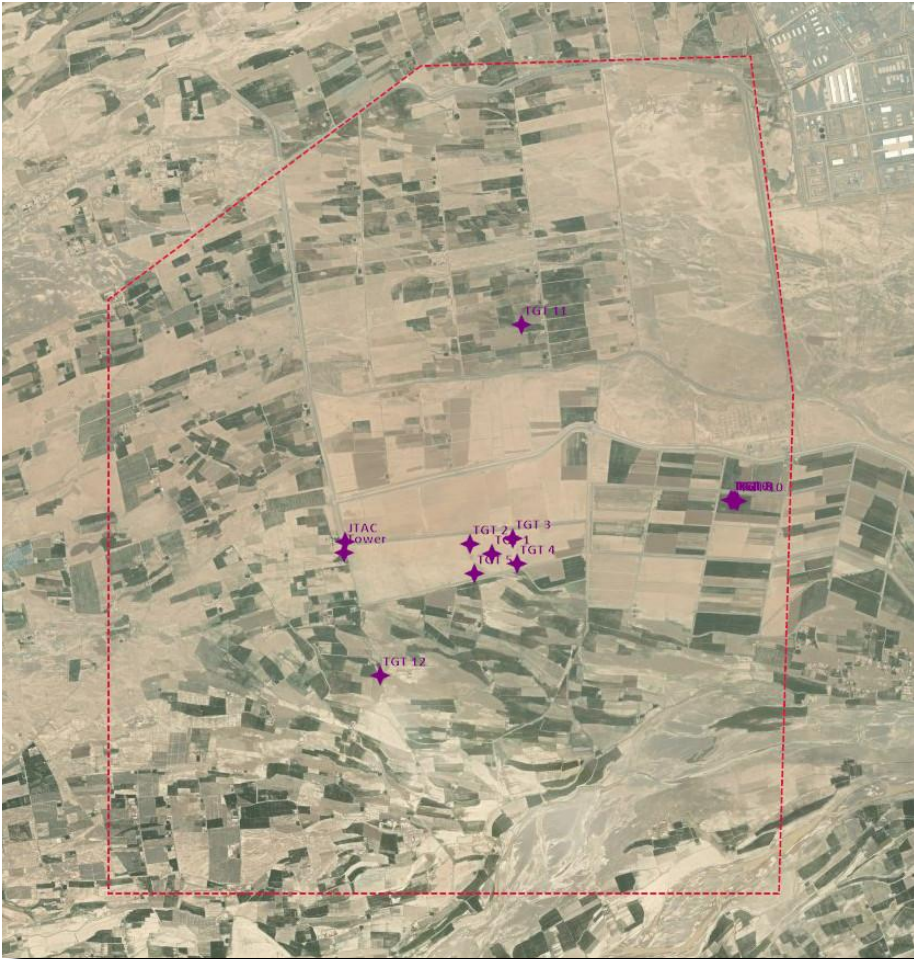


AFGHANISTAN



TARNAK RANGE



TARNAK RANGE

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● TARGETS DESCRIPTION	p.7
● TARGETS COORDINATES	p.8
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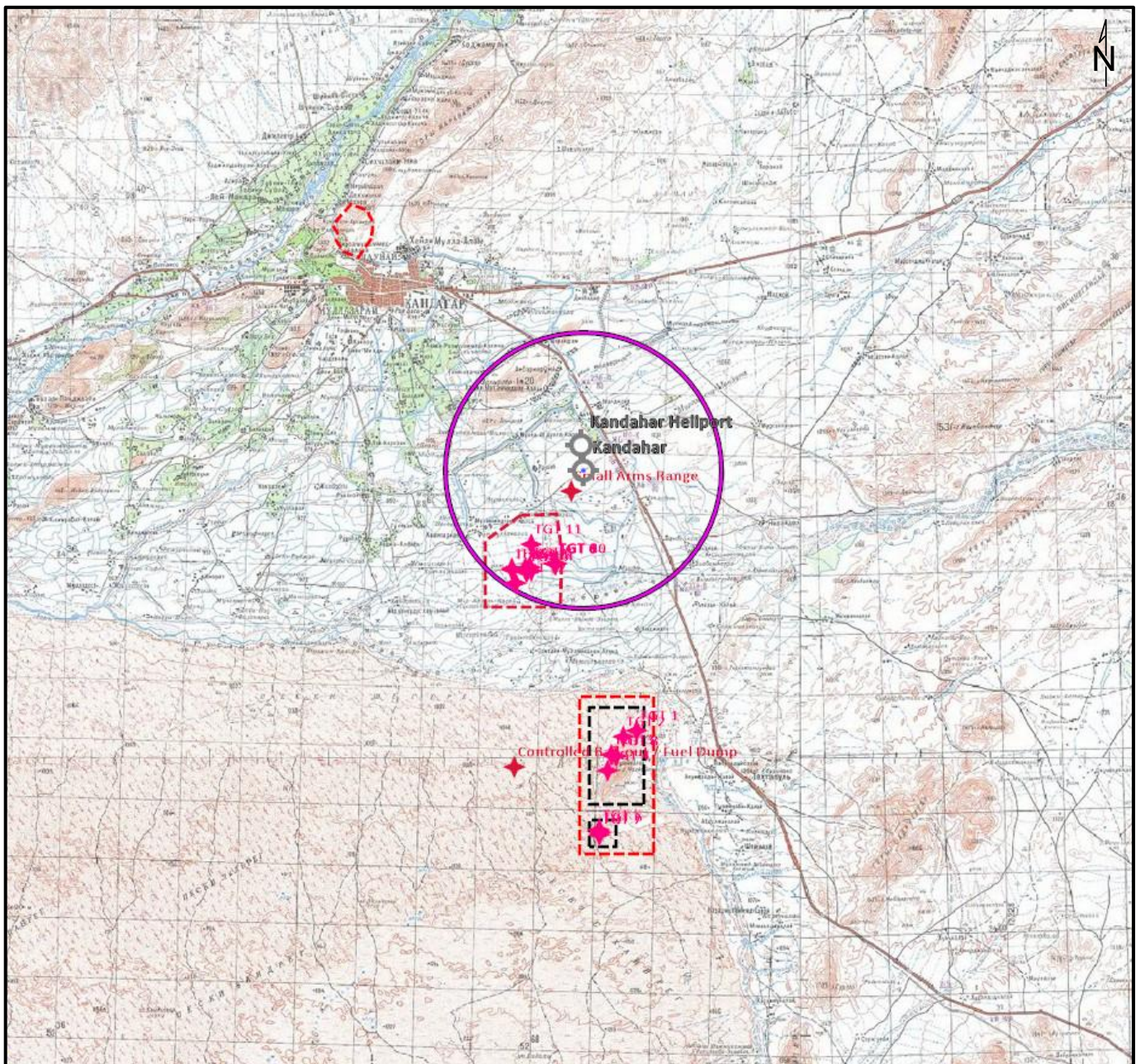
RANGE DESCRIPTION (1/4)

Tarnak Range is a live-fire training area dedicated to air-to-ground fixed wings operations. It is located 2.0 Nm South-East of Kandahar airfield (KAF). The range encompasses the former al-Qaeda training camp known as Tarnak Farms.

Aircraft operating in Tarnak range are also operating within Kandahar Class D airspace (5 Nm radius, SFC to 6,000'AMSL) and Kandahar Class C airspace (30 Nm radius, 1,000'AGL to FL200) when outside of range boundaries.

Monitoring Kandahar Approach on CARMINE 2 (360.200 MHz) when operating within Tarnak Range is mandatory.

Note the proximity with Texas Helo Range (SFC to 6,000'AMSL) located 5Nm SE of Tarnak Range.



Map of Tarnak Range.

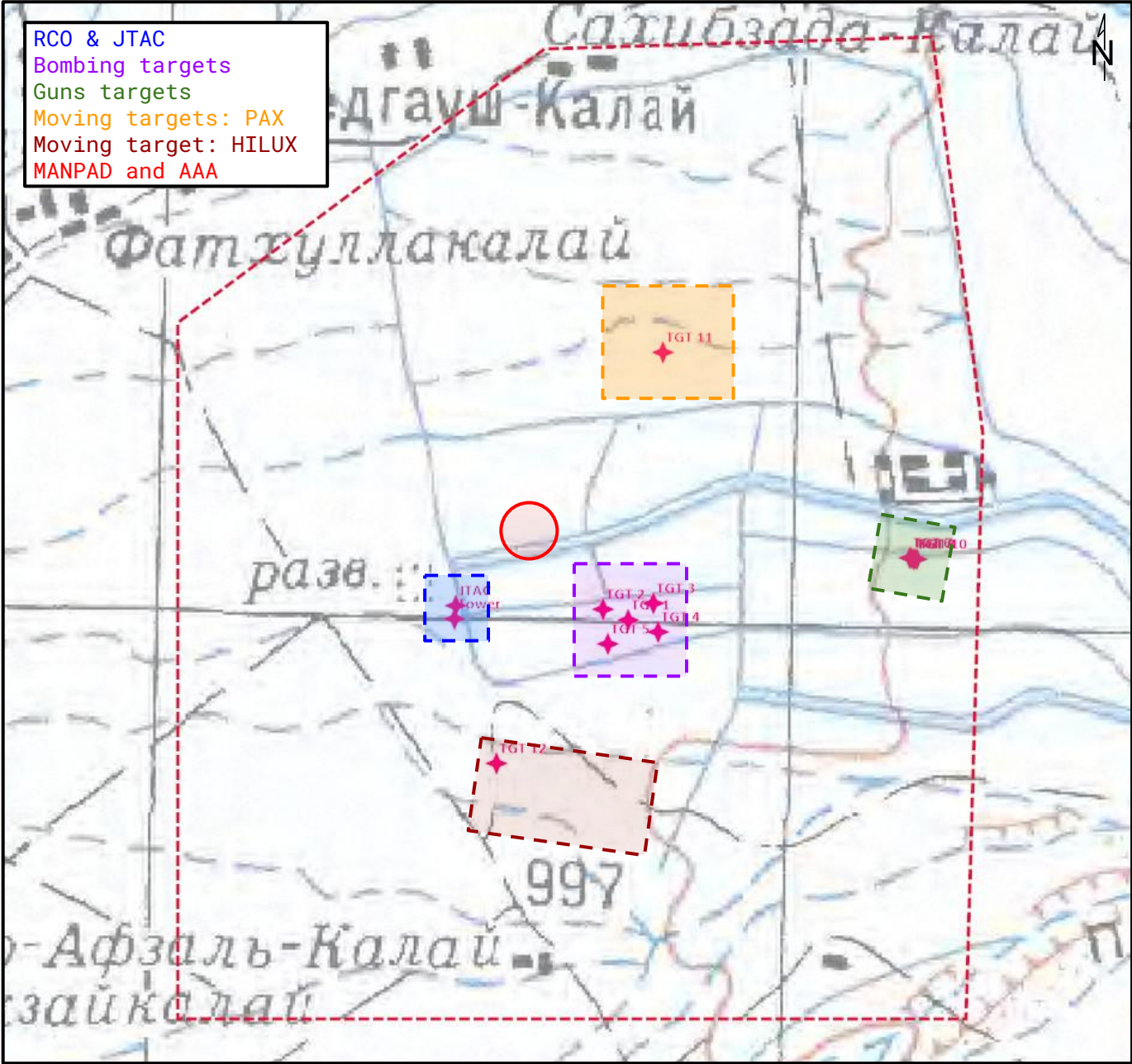


RANGE DESCRIPTION (2/4)

The **Range Control Officer** (RCO) operates from a watchtower positioned at 270° (T), 0.7 NM from TGT 1. Radio contact with the RCO, callsign **SPARTAN** on **PURPLE 1 (126.200 MHz)**, is mandatory prior to any live-fire activity. The RCO is responsible solely for ordnance delivery clearance; all airspace deconfliction must be coordinated directly with Kandahar Approach.

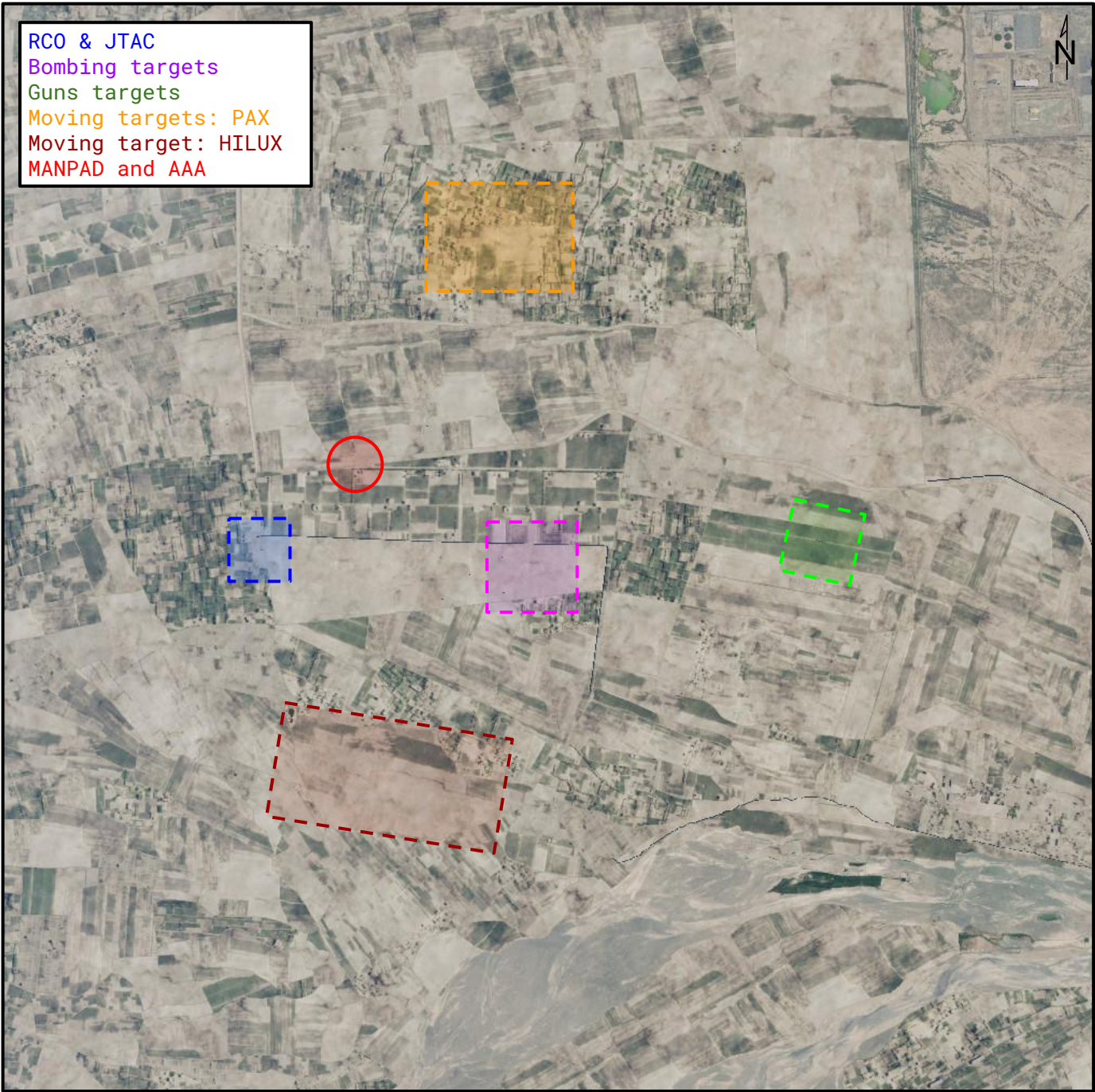
A **JTAC**, callsign **BADGER 1**, is co-located with the RCO and can provide target marking and LASER designation on **MAROON 2 (345.500 MHz)**.

- The range features:
- 5 fixed bombing targets (TGT 1 to 5);
 - 5 fixed gun targets (TGT 6 to 10);
 - 2 moving targets for dynamic engagement scenarios (TGT 11 and 12);
- MANPAD and AAA threats can be manually activated for SAM threat training.



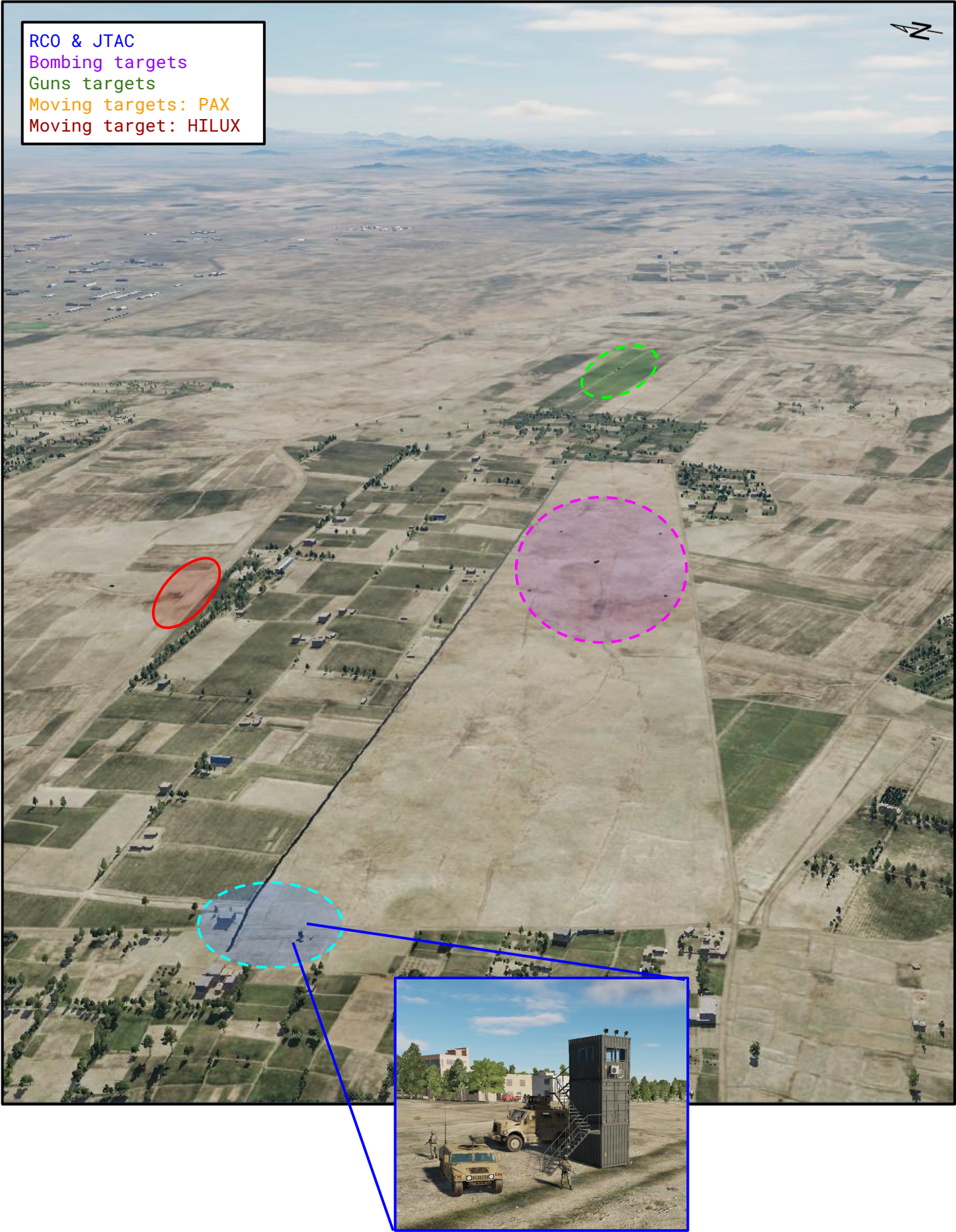
Detailed map of Tarnak Range.

RANGE DESCRIPTION (3/4)



In-game satellite view of Tarnak Range.

RANGE DESCRIPTION (4/4)



TARGETS DESCRIPTION



TGT 1
Fixed T-55



TGT 2
Fixed T-55



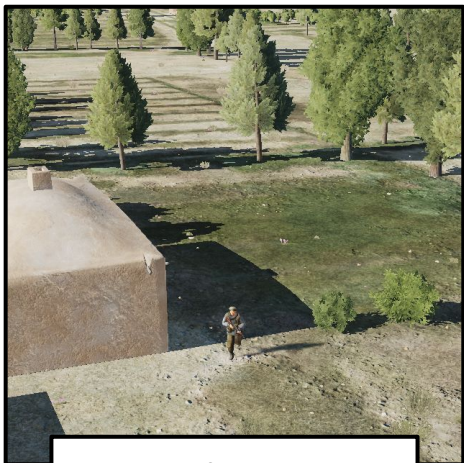
TGT 3
Fixed T-55



TGT 4
Fixed T-55



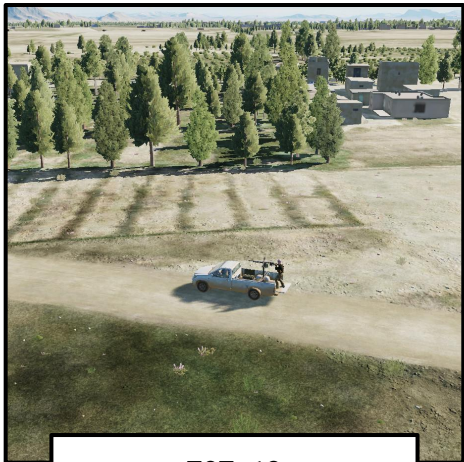
TGT 5
Fixed T-55



TGT 11
Group of moving PAX



TGT 6,7,8,9,10
Fixed T-55



TGT 12
Moving HILUX



TARGETS COORDINATES

Name	Description	Coordinates	Altitude	Restrictions
Bombing Targets				
TGT 1	T-55	N31°26.780' E065°48.500'	3,264 ft	Mandatory attack heading: 050°(T) ±20°
TGT 2	T-55	N31°26.820' E065°48.400'	3,264 ft	
TGT 3	T-55	N31°26.840' E065°48.600'	3,268 ft	
TGT 4	T-55	N31°26.740' E065°48.620'	3,268 ft	
TGT 5	T-55	N31°26.700' E065°48.420'	3,268 ft	
Guns Targets				
TGT 6	T-55	N31°26.993' E065°49.625'	3,284 ft	Mandatory attack heading: 360°(T) ±20°
TGT 7	T-55	N31°26.993' E065°49.632'	3,284 ft	
TGT 8	T-55	N31°26.992' E065°49.640'	3,284 ft	
TGT 9	T-55	N31°26.992' E065°49.646'	3,284 ft	
TGT 10	T-55	N31°26.991 E065°49.653	3,284 ft	
Moving Targets				
TGT 11	Group of PAX	N31°27.695' E065°48.640'	3,268 ft	Mandatory attack heading: 230°(T) to 050°(T)
TGT 12	HILUX	N31°26.290' E065°47.976'	3,261 ft	



STANDARD PATTERNS

Upon initial contact, and depending on traffic density at the range, aircraft will be directed either to the holding pattern or to the appropriate initial point (IP) for immediate entry.

HOLDING PATTERN:

- Airspace: within Kandahar Class C
- Anchor Point: 231°(T), 15 Nm from TGT 1, track: 090°/270°(T)
- Altitude: 2,000'AGL to FL200
- Right-hand turns, maximum endurance speed
- Radio: contact RCO SPARTAN on PURPLE 1

ENTRY:

- At or above FL100: multidirectional
- Below FL100: south-west via Anchor Point
- Clearance from SPARTAN on PURPLE 1 is mandatory to proceed beyond the IP

LOW ALTITUDE OPERATIONS:

- Below 5,000' AGL: Day or Night, VMC only
- Routing: follow published patterns for deconfliction with Texas Helo Range and Kandahar airfield
- Descent: no lower than 250'AGL until IP
- Radio: upon passing initial point 1 to 4, call "IN" with attack details

MEDIUM & HIGH ALTITUDE OPERATIONS:

- At or above 5,000'AGL: Day or Night, VMC or IMC
- Routing: free patterns are allowed SW of range, adherence to published patterns is advised
- Circling Patterns: coordination with Kandahar Approach is mandatory
- Radio: upon passing initial point or NLT 30" before weapons release, call "IN" with attack details

EXIT:

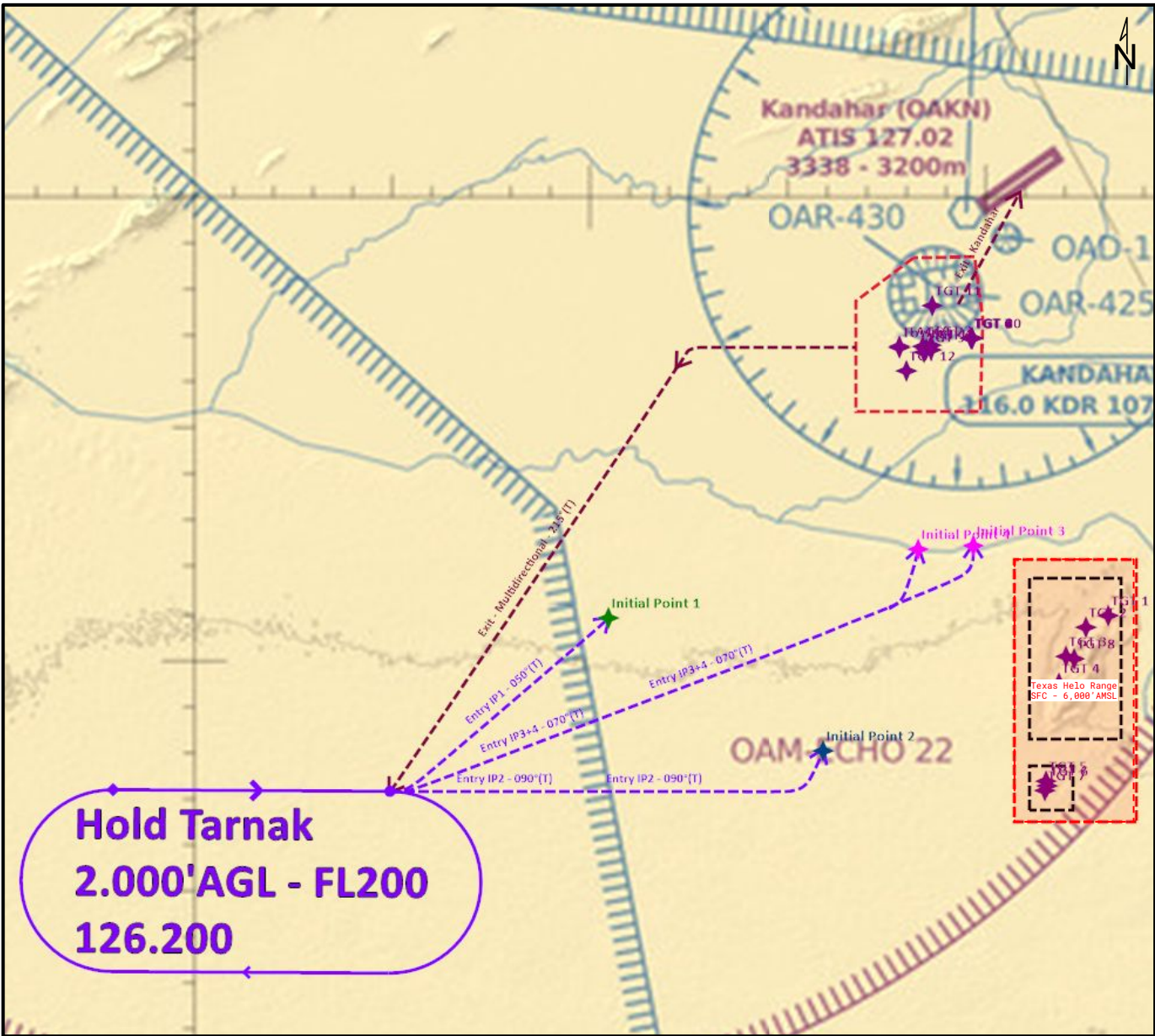
- Recovery to Kandahar: coordinate with Kandahar Approach to proceed overhead airfield
- Other: proceed westbound up to 5 NM from TGT 1, then turn heading 215° (T) to the Anchor Point at or above 5,000'AGL, then execute multidirectional departure in coordination with Kandahar Approach

MANDATORY RADIO CALLS:

- "IN" call: at IP or NLT 30" before release
 - "IN"
 - Attack profile (pop-up, loft, level, etc...)
 - Weapons type (bombs, guns, etc...)
 - Status (dry, hot, LASER if applicable)
- "OUT" call:
 - "OUT"
 - Status ("DRY", "HOT", "NO DROP", "LASING")



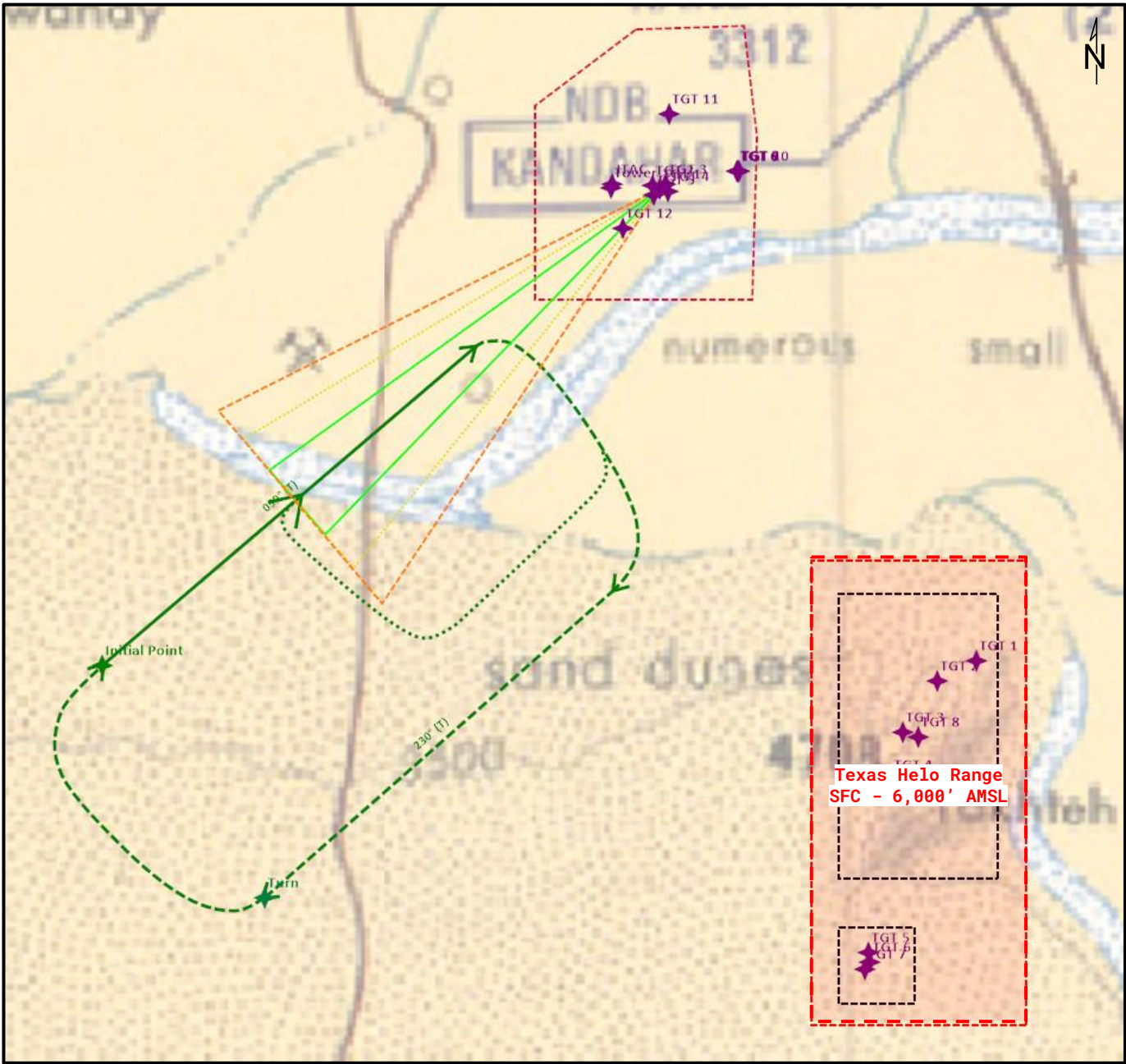
HOLDING PATTERN
AND RANGE ENTRY/EXIT



Name	Description	Coordinates (WGS 84)	Altitude (AMSL)	Position
Anchor Point	Container	N31°17.163' E065°34.939'	3,707 ft	231°(T) 15.0 Nm / TGT 1
Initial Point 1	Container	N31°20.916' E065°40.450'	3,412 ft	230°(T) 9.0 Nm / TGT 1
Initial Point 2	Container	N31°18.052' E065°45.883'	3,645 ft	195°(T) 9.0 Nm / TGT 1
Initial Point 3	River	N31°22.493' E065°49.676'	3,245 ft	180°(T) 4.5 Nm / TGT 8
Initial Point 4	River	N31°22.411' E065°48.285'	3,232 ft	195°(T) 4.7 Nm / TGT 8



BOMBS PATTERNS
DIRECT ATTACK



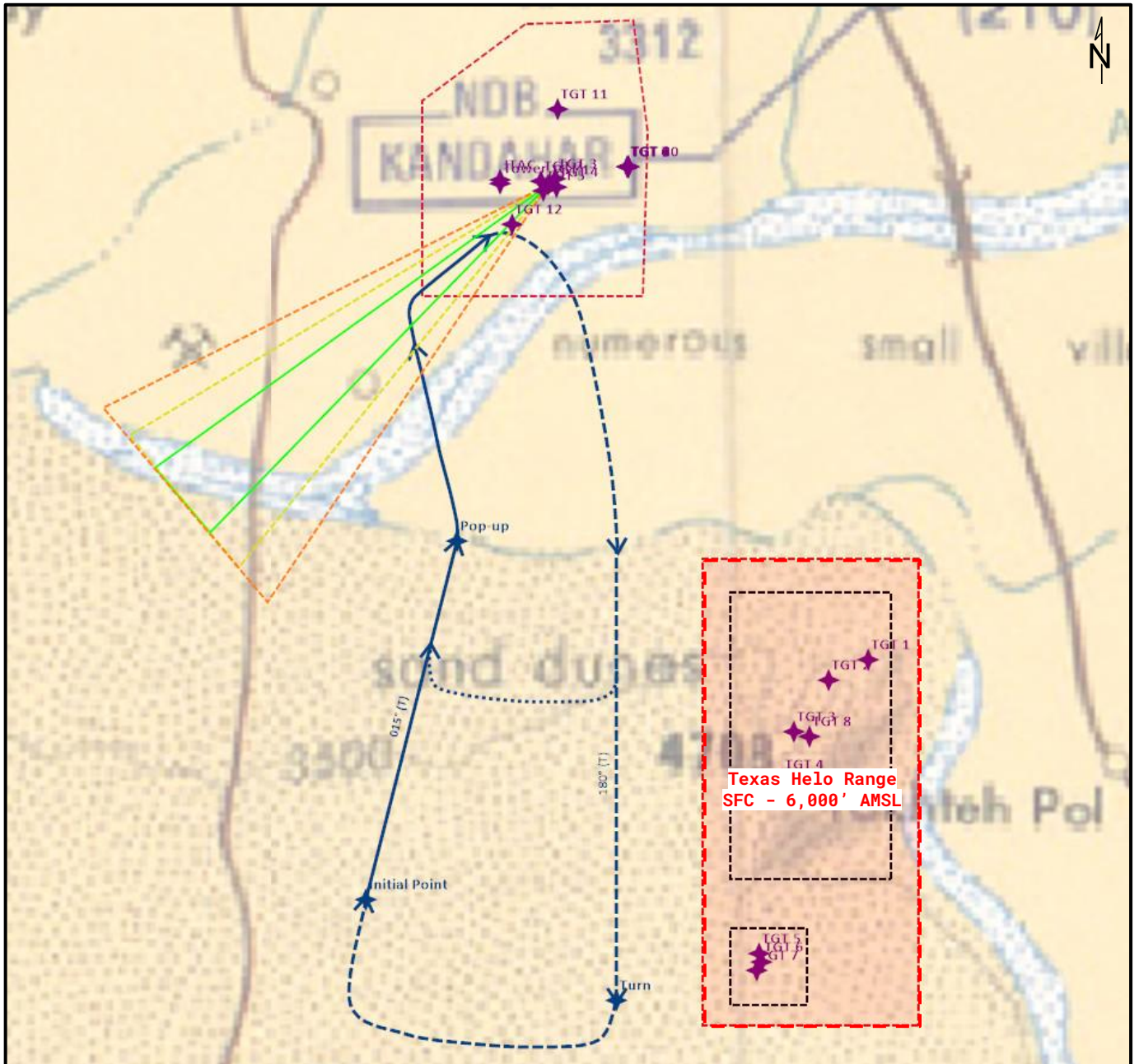
Name	Description	Coordinates (WGS 84)	Altitude (AMSL)	Position
Initial Point 1	Container	N31°20.916' E065°40.450'	3,412 ft	230°(T) 9.0 Nm / TGT 1
Turn	N/A	N31°18.066' E065°42.789'	3,589 ft	210°(T) 10.0 Nm / TGT 1

Cold leg: 230°(T)
Short Pattern: between 6 and 9 Nm / TGT 1



BOMBS PATTERNS

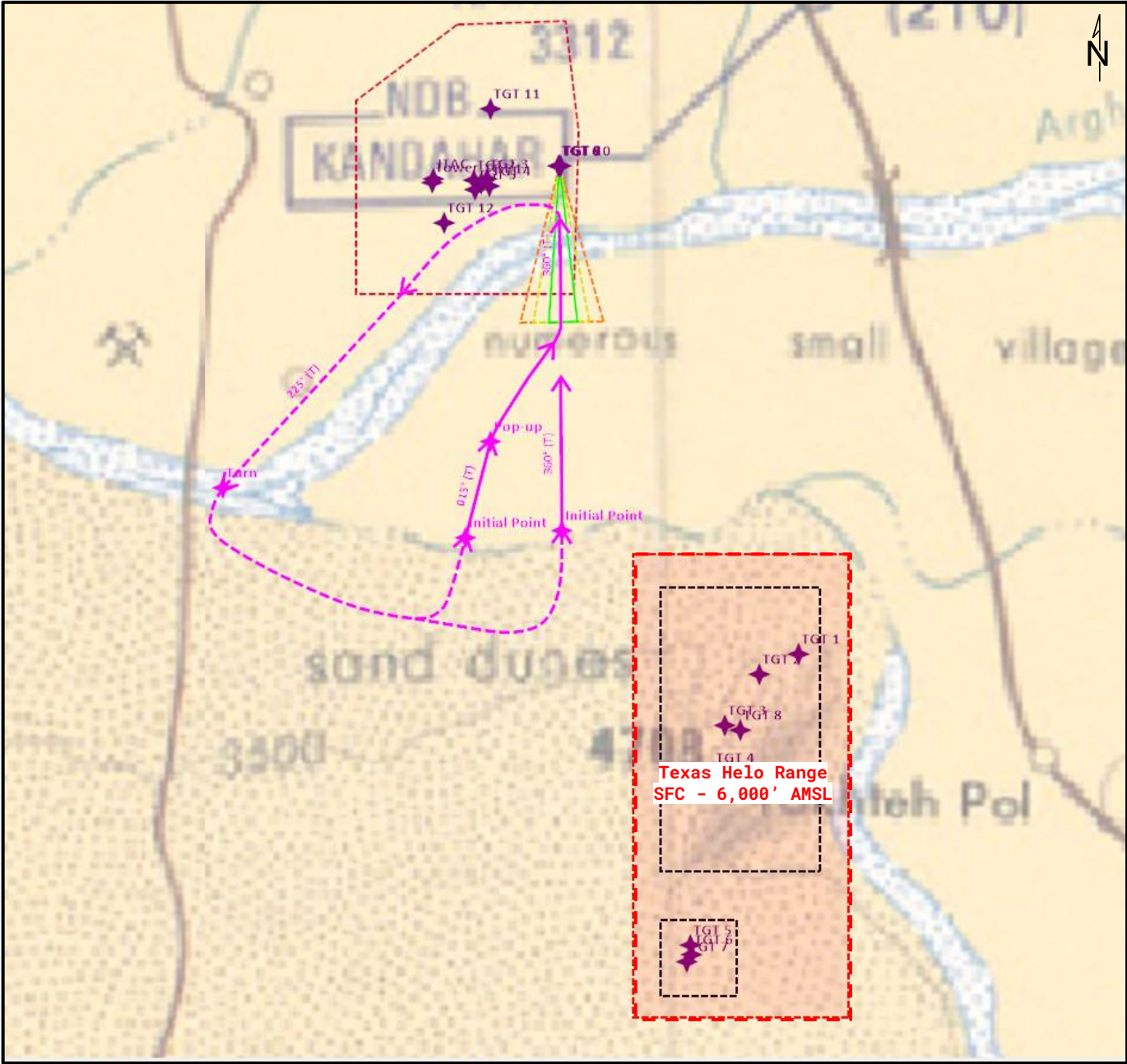
OFFSET ATTACK



Name	Description	Coordinates (WGS 84)	Altitude (AMSL)	Position
Pop-up Point	River	N31°22.420' E065°47.188'	3,323 ft	195°(T) 4.5 Nm / TGT 1
Initial Point 2	Container	N31°18.052' E065°45.883'	3,645 ft	195°(T) 9.0 Nm / TGT 1
Turn	N/A	N31°16.810' E065°49.480'	3,776 ft	175°(T) 10.0 Nm / TGT 1



GUNS PATTERNS

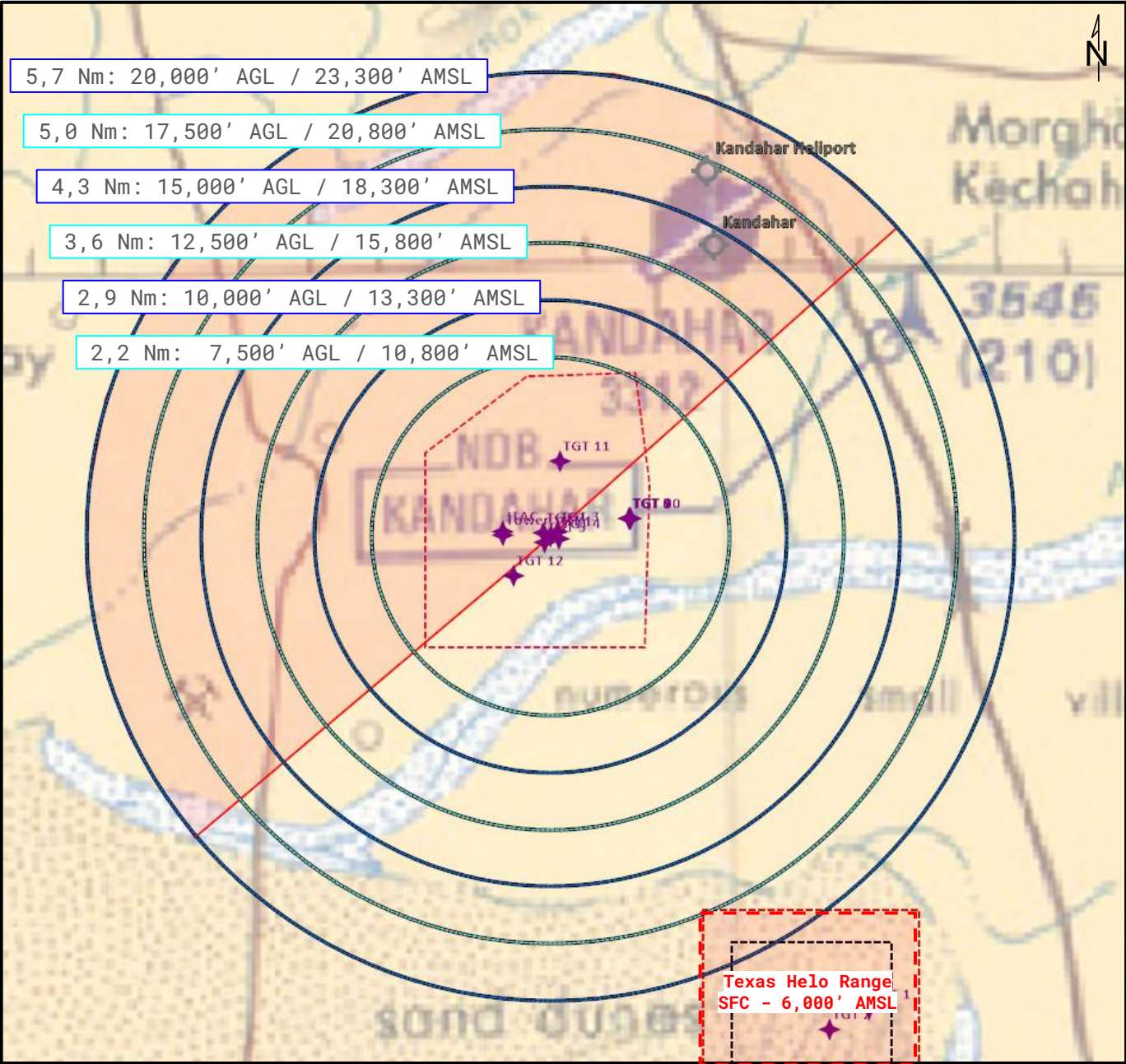


Name	Description	Coordinates (WGS 84)	Altitude (AMSL)	Position
IP 3 (Direct)	River	N31°22.493' E065°49.676'	3,245 ft	180°(T) 4.5 Nm / TGT 8
IP 4 (Offset)	River	N31°22.411' E065°48.285'	3,232 ft	195°(T) 4.7 Nm / TGT 8
Turn	River	N31°23.030' E065°44.792'	3,192 ft	226°(T) 5.7 Nm / TGT 1

Cold leg: 225°(T)



MOVING TARGETS
CIRCLING PATTERNS



Mandatory attack heading: 230°(T) to 050°(T).
Range/altitude references for a 30° dive.