Name:

Transport Convoy

Environment:

Hard access path (asphalt, loose chippings, concrete)

Situation:

There is a delivery for a camp within approx 20 km.

A convoy of at least two vehicles has to be moved to this camp.

There will be dynamic objects and static obstacles on the route.

Enemy presence at the transport route can be expected.

Therefore the transport should be executed without risking own personnel

Objective:

Move at least two vehicles of at min 50kg each to the target location as fast as possible

Execution/Implementation:

Only one vehicle can be manned.

Acquire own position (not known)

Approach given waypoints (UTM coordinates) on the way to destination.

Approach should be done with maximum autonomy or semi-autonomously

Acquire position of vehicle using UTM/GPS coordinates

Plot route in digital map

If possible, transmit live position and imagery to the control station

Timing:

Max: Duration approx. 60 min.

Constraints:

There will be NO inspection of the operational area permitted or possible! (Not as in 2006)

Only one person is allowed to control the vehicles.

There is only one control station allowed, either vehicle mounted or outside the vehicle

The troop receives a section of a map with UTM grid and measures

See Example.

Medium: Memory-Stick.

The operator can control the vehicle by remote control, teleoperation, semi-autonomous (waypoint) or autonomous or in any combination of these methods

There will be mobile obstacles, which continuously change the route

The scenario ends with reaching the target location.

An intervention of the troop during the scenario is not permitted.

If for any reason the troop fails they can use the next available (unallocated) start slot for a retry

Every participant can retry as often as there are empty start slots available

```
#! UTM (WGS84)
19 or 21 waypoints
32U 564462.74m E 5547263.27m N

32U 564376.77m E 5547294.88m N

32U 564418.15m E 5547357.05m N

32U 564482.46m E 5547333.97m N

32U 564462.74m E 5547263.27m N

32U 564376.77m E 5547294.88m N

32U 564418.15m E 5547357.05m N

32U 564482.46m E 5547333.97m N

32U 564462.74m E 5547263.27m N

32U 564376.77m E 5547294.88m N

32U 564418.15m E 5547357.05m N

32U 564482.46m E 5547333.97m N

32U 564462.74m E 5547263.27m N

32U 564376.77m E 5547294.88m N

32U 564418.15m E 5547357.05m N

32U 564482.46m E 5547333.97m N

32U 564376.77m E 5547294.88m N

32U 564418.15m E 5547357.05m N

32U 564482.46m E 5547333.97m N
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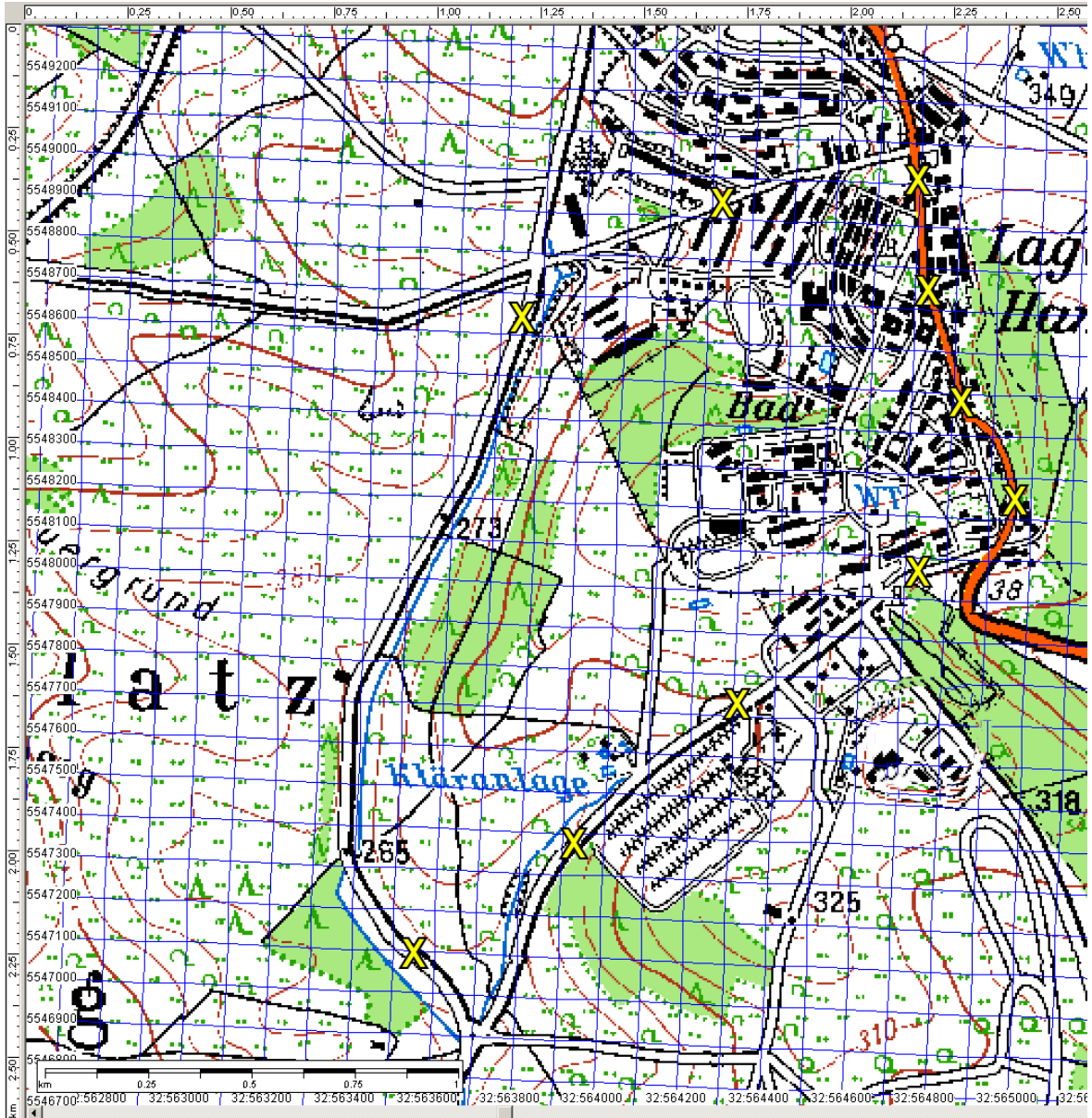
Name:

Transport mule

Environment:

Non-urban area, vegetation, acre, grass, sand, water, stones, bushes some semi-urban structures like buildings roads, paths, or infrastructure

Situation:

There are two camps with a distance of approx. 2 km in between.

A vehicle should serve as a "mule" between the two camps carrying 30Kg (Kilogram) of payload

There will be dynamic objects and static obstacles on the route.

Enemy presence at the transport route can be expected.

Therefore, the transport should be executed unmanned to avoid risking any personnel

Objective:

Shuttle as often as possible between the two camps carrying the payload.

Execution/Implementation:

Setup troop of max two people

Only one vehicle can be used.

The vehicle starts in one of the two camps.

Acquire own position (not known)

Approach target location by using the marked target area (red circle in map) and given UTM co-ordinates

Approach should be done with maximum autonomy or semi-autonomously

Acquire position of vehicle using UTM/GPS coordinates

Plot route in digital map

If possible, transmit live position and imagery to the control station

Timing:

Max: Duration aprrox. 60 min.

Constraints:

There will be NO inspection of the operational area permitted or possible! (Not as in 2006)

Each team has to name a technician and an operator.

The two people are the troop

Only one person is allowed to use the control station.

The troop will receive a section of a digital map with UTM grid and measures and a target location in UTM co-ordinates.

See Example.

Medium: Memory-Stick.

The operator can control the vehicle by remote control, teleoperation, semi-autonomous (waypoint) or autonomous or in any combination of these methods

There will be mobile obstacles, which continuously change the route

The scenario ends with reaching time limit.

An intervention of the troop during the scenario is not permitted.

If for any reason the troop fails they can use the next available (unallocated) start slot for a retry

Every participant can retry as often as there are empty start slots available

```
#! UTM (WGS84)

32U 564462.74m E 5547263.27m N
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