AIRBORNE ISR/ UNMANNED AIRCRAFT SYSTEMS (UAS) ON COMMERCIAL CONTRACT AND LETTERS OF ASSIST
MISSION SCENARIOS/CHALLENGES
UAS in the Peacekeeping Intelligence Cycle
## UN Peacekeeping UAS/RPAS Table

<table>
<thead>
<tr>
<th>Class</th>
<th>Category</th>
<th>Recommended employment</th>
<th>Normal approximate operating altitude AGL</th>
<th>Range</th>
<th>Recommended C2 level</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class III</td>
<td>HALE</td>
<td>Strategic/national</td>
<td>&lt;65,000 ft</td>
<td>Unlimited (BLOS)</td>
<td>AOR/mission</td>
<td>Global hawk</td>
</tr>
<tr>
<td></td>
<td>MALE</td>
<td>Operational/theatre</td>
<td>&lt;45,000 ft</td>
<td>Unlimited (BLOS)</td>
<td>AOR/mission</td>
<td>Heron 1/ Hermes 900</td>
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<tr>
<td>Class II</td>
<td>Tactical</td>
<td>Tactical formation</td>
<td>&lt;18,000 ft</td>
<td>&lt;200 km (LOS)</td>
<td>Brigade</td>
<td>Hermes 450/ Falco Sperwer</td>
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<tr>
<td>Class I</td>
<td>Small</td>
<td>Tactical unit</td>
<td>&lt;1,000 ft</td>
<td>&lt;50 Km (LOS)</td>
<td>Battalion/ regiment, sector</td>
<td>Scaneagle/ Shadow 200/ Luna</td>
</tr>
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<td></td>
<td>Mini</td>
<td>Tactical sub-unit (manual or hand launch)</td>
<td>&lt;1,000 ft</td>
<td>&lt;25 Km (LOS)</td>
<td>Company, platoon, squad</td>
<td>Raven/Aladin/ Puma/ Skylark Heidrun V1</td>
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<td></td>
<td>Micro</td>
<td>Tactical sub-unit (manual or hand Launch, tethered)</td>
<td>&lt;400 ft</td>
<td>&lt;5km (LOS)</td>
<td>Platoon, squad, team</td>
<td>WASPIII/MIKADO/ DJI Phantom 4, DJI Mavic Pro Hovermast-100</td>
</tr>
</tbody>
</table>
Current deployment of UAS
03 November 2020

MINUSMA
CLASS I: 6 Raven, 10 Luna, 4 Aladin, 2 Puma, TCCs MOUs
CLASS III: 3 Heron 1

MONUSCO
CLASS I: TCCs MOUs
CLASS III: 3 Falco Evo

MINUSCA
CLASS I: 40 Phantom 4, TCCs MOUs
3xOrbiter 2, 3xOrbiter 3

UNSOS
CLASS I: 5xRaven, TCCs MOUs
CLASS II: 2xScaneagle
CLASS III: 2xHeron 1
IMAGE DETAIL: The CASEVAC helicopter departing the area.

IA COMMENT: Following successful casualty extraction the helicopter left the area at 1658hrs.

The remainder of the convoy then filtered past the bridge, driving through the shallow water, and formed up on the north side in preparation to continue the journey to Bambara Mounde.

At approximately 1730hrs the convoy was complete on the north side of the bridge and began moving again towards Bambara Mounde.

During time overhead, no suspicious activity was identified.
Infrastructure and POL assessment
Soldier in FARDC pattern uniform and weapon slung on shoulder.

Suspected New ADF Camp

03 x FIREPOINTS

New FARDC Camp (Pln Size)
Vehicles detected on the road

Vehicles detected crossing the desert

Other targets in the desert

Targets around and near airfield

Airfield

360° GMTI surveillance – ~ 30 min time lapse
KEY — As assessed by CCD data

- Heavily used route
- Used by single vehicle or pedestrian
- Route not used

Image Detail. HERMES conducted a Coherent Change Detection (CCD) in order to assess the usage of Route Lion through Soumpi between 0630hrs and 1130hrs. It is assessed that graded earth route of Route Lion is extensively used. Therefore any route avoidance on the road could be indicative of IED emplacement activity.

The CCD data indicated that no vehicles or pedestrians used a route to the north of Route Lion. It is therefore assessed that this section of the northern route is not suitable for heavy or armoured vehicles and should be avoided.
challenges

• Financial. Cost efficiency. High cost and limited PKO budgets.

• Operational – Effectiveness. Enough Tasking lines 24/7, mobility; readiness

• Technical/safety - UAS equipment (sense and avoid, transponders). Payloads, sensors, cameras, radars, etc. Weather forecasting

• Logistics – Self sustainable. Limited resources

• Legal/ Political - Data ownership, national caveats
Thanks