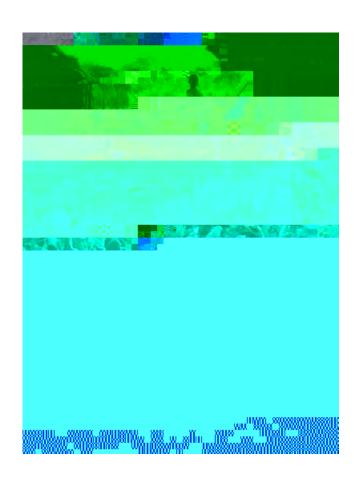
Calvin Ruysen Desk Officer, Southern Africa Region



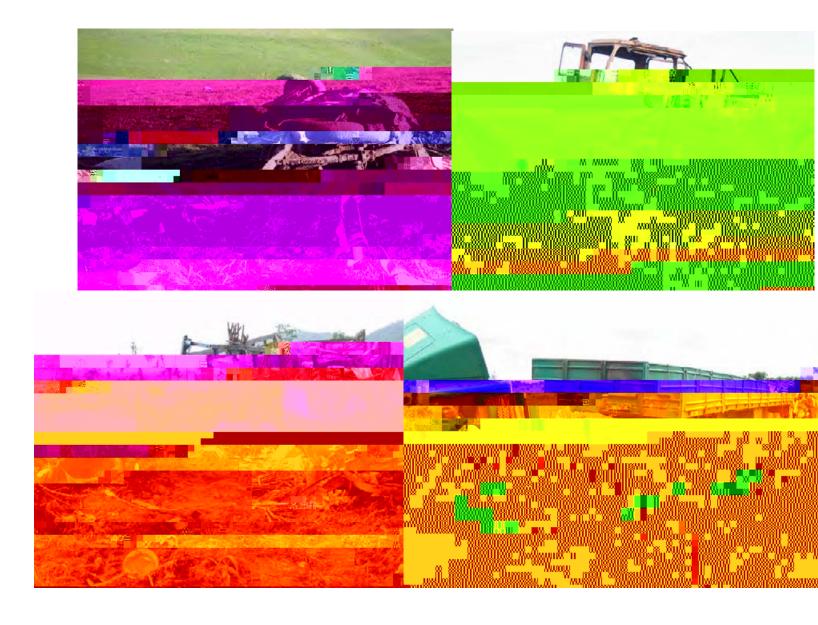


# Technical Challenges in Humanitarian Clearance of Anti Vehicle Mines: A Field Perspective



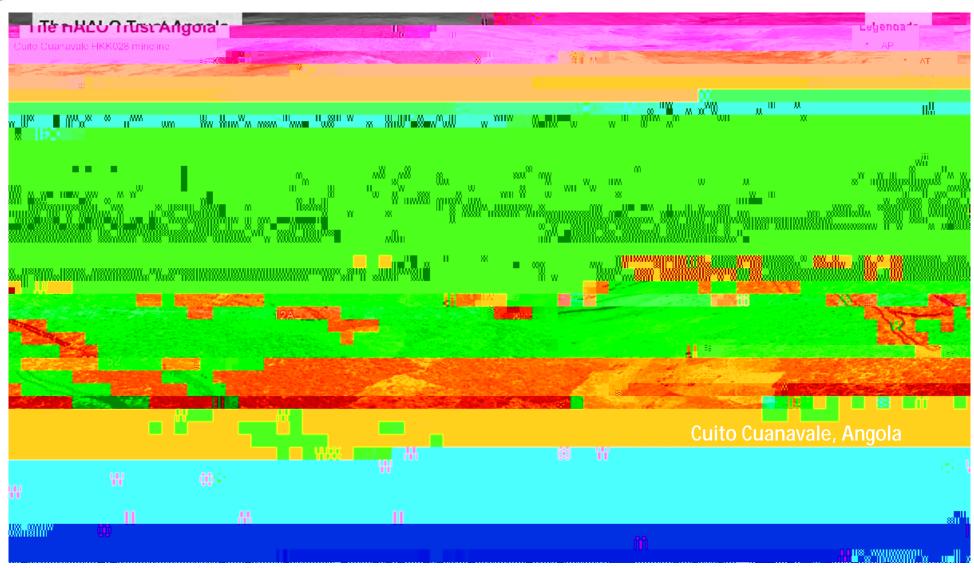


#### **Anti Vehicle Mines Cause Civilian Accidents**



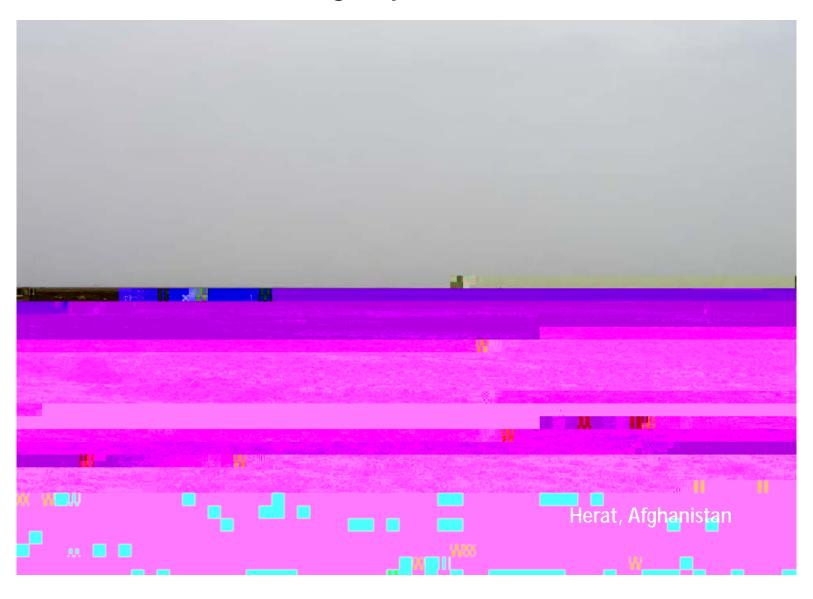


#### **Structured Minefields**





## **Large Open Areas**



#### Roads and



#### Metal Cased Anti Vehicle Mines

- Easy to locate with metal detectors
- Faster, less costly clearance

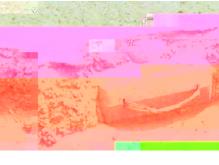


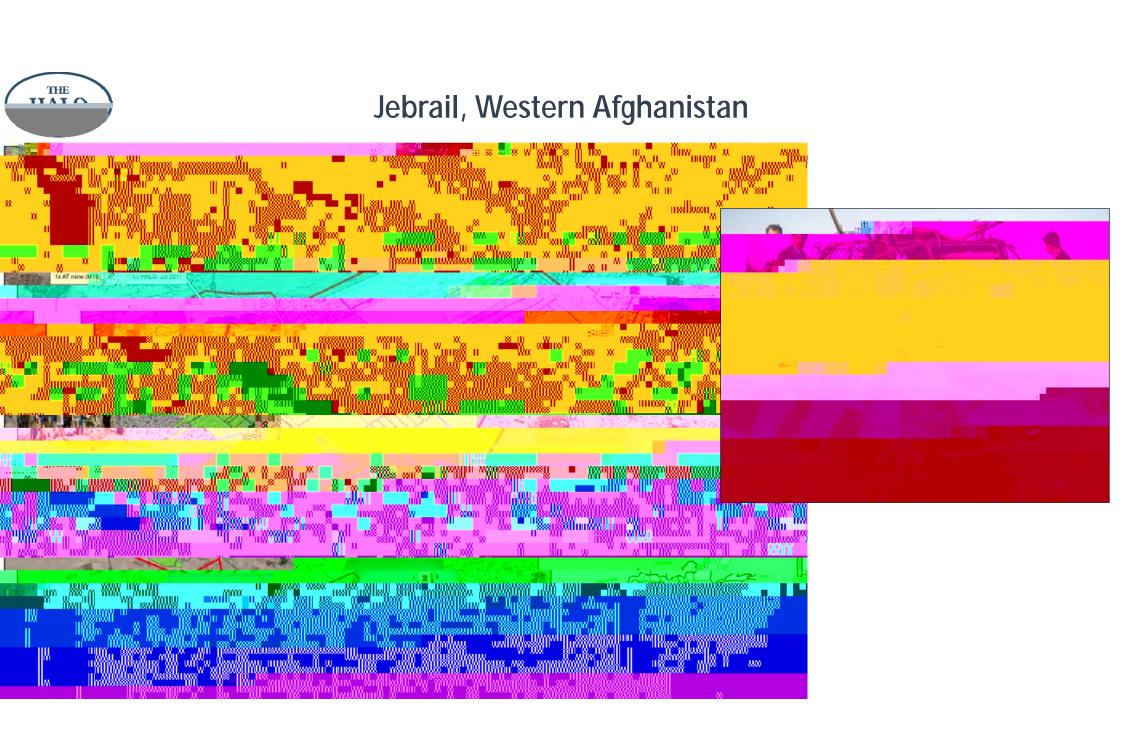
- Very difficult or impossible to locate with metal detectors
- Slower, more costly clearance









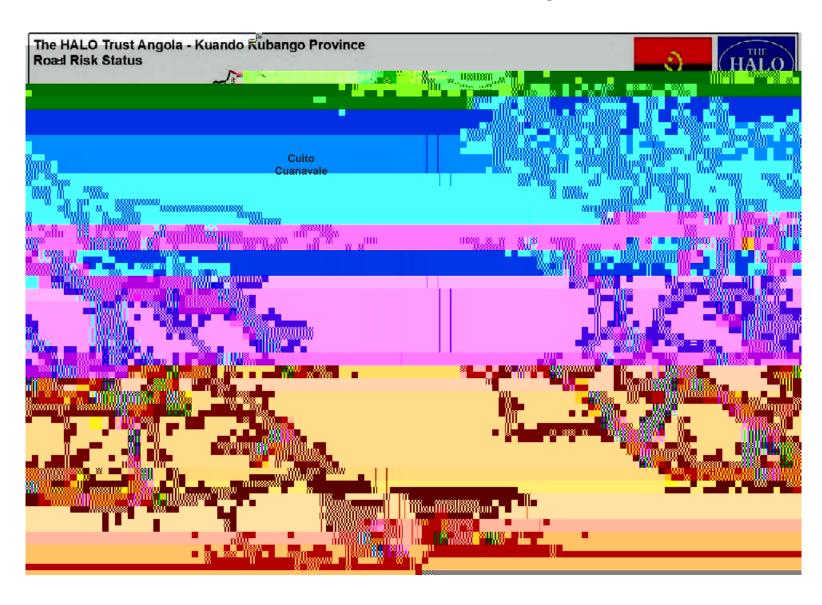


## Jebrail Clearance



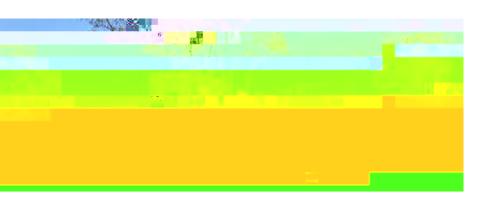


# **Roads in Southern Angola**





# **Clearance on Sandy Roads**



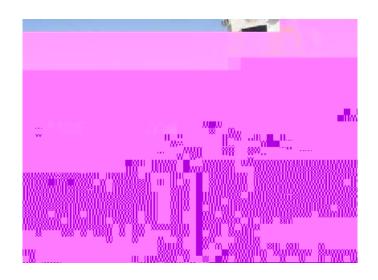


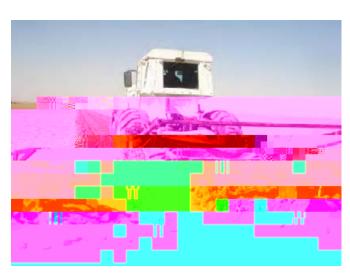
# **Beyond Metal Detectors**

• Ground Penetrating Radar

• Gill Bucket

Rotary Mine Comb





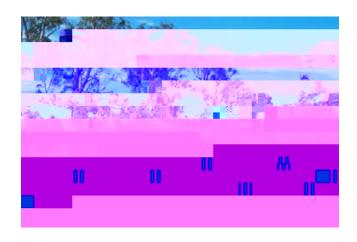


## **Alternative Techniques**

• Explosive Trace Detection

Tillers and Flails

Other Prototypes







# **Impact of Clearance**

