



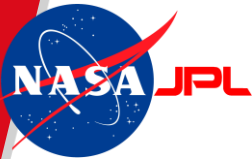
FINDERテクノロジー

双日エアロスペース(株)
03-6870-7222



Forward Thinking. Rapid Response.

FINDERの革新性



Nasa ジェットエンジン研究所
がファインダー開発についての
資金、開発協力



米国バージニアでの商業モデルでのテストが成功



R4 がファインダー HX,
2W, & OC
開発



Sep 2013



Feb 2014



Jun 2014



Apr 2015



Aug 2015

R4 ファインダー
のライセンス
生産権利を



ネパール地震で
4名を救助



R4

Forward Thinking. Rapid Response.

ネパールでの活躍

newswise

Previous Article Next Article



DHS and NASA Technology Helps Save Four in Nepal Earthquake Disaster

Released: 5-May-2015 8:05 PM EDT

Source Newsroom: Homeland Security's Science & Technology Directorate



The men had been trapped beneath the rubble for days in the hard-hit village of Chautara. David Lewis, president of one of S&T's commercial partners, R4 Inc. out of Eatontown, N.J., arrived in Nepal with two prototype FINDER devices on April 29 to assist in the rescue efforts. He joined a contingent of international rescuers from China, the Netherlands, Belgium and members of the Nepali Army in Northern Nepal. Using FINDER, they were able to detect two heartbeats beneath each of two different collapsed structures, allowing the rescue workers to find and save the men.



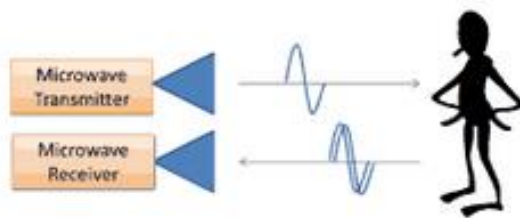
Forward Thinking. Rapid Response.

FINDERの革新性

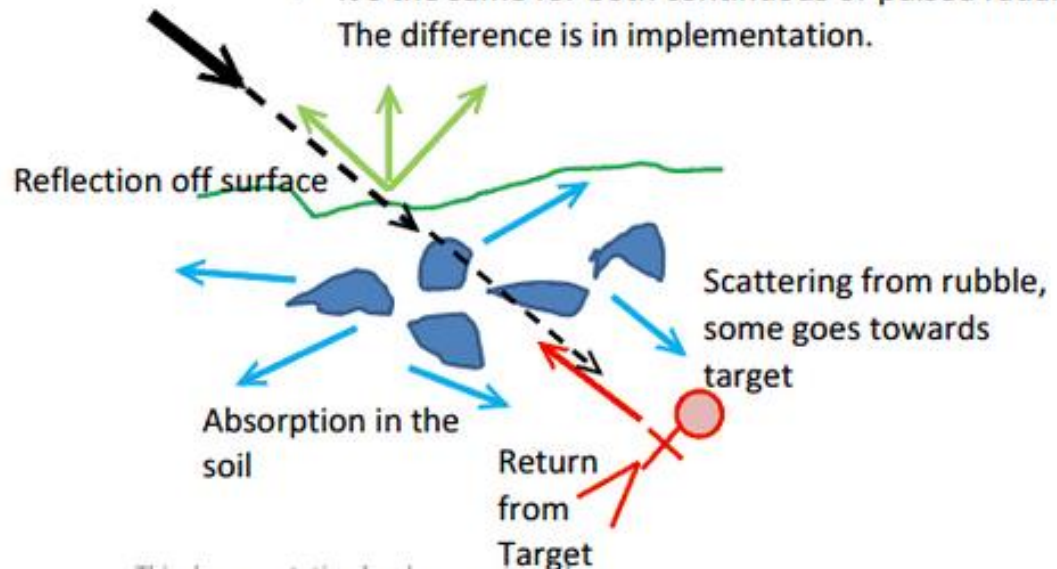


FINDER – 検知原理?

How the Radar Works



- The radar illuminates the rubble pile (like a bright searchlight), and we get reflections back from everything, including the victim.
- But, only the victim is moving (breathing and heartbeat), so we look for tiny changes in the reflection.
- It's the same for both continuous or pulsed radars. The difference is in implementation.



FINDER

用途

一般利用

救難救助

瓦礫

-

Range
20M



オープン
空間

-

Range
30M

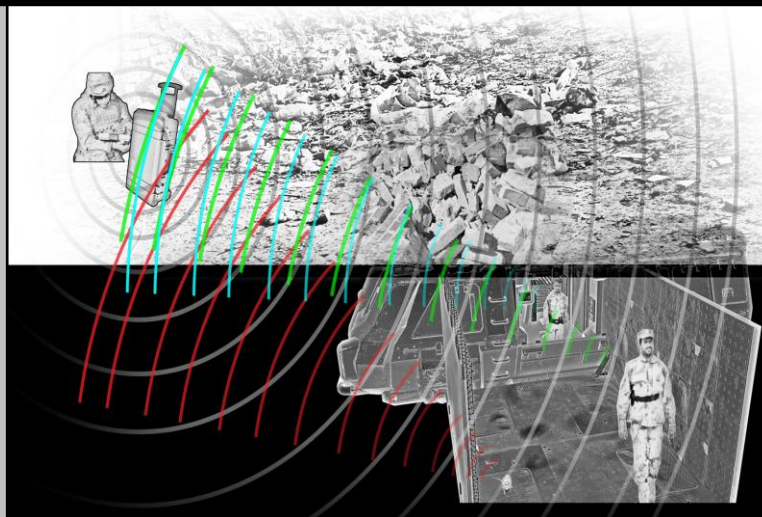


脅威物検知

トンネル

-

Range
10M



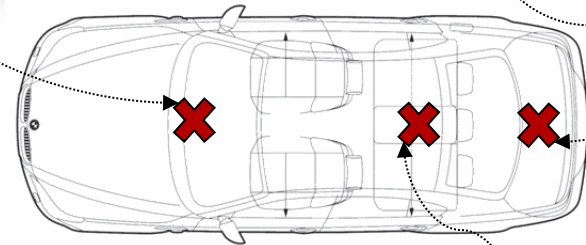
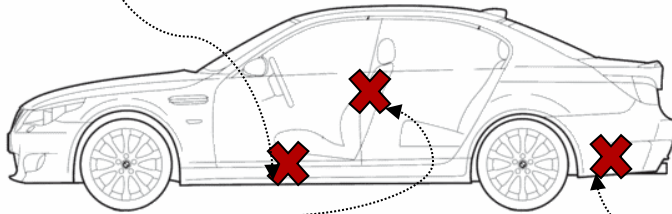
コンクリート
壁

-

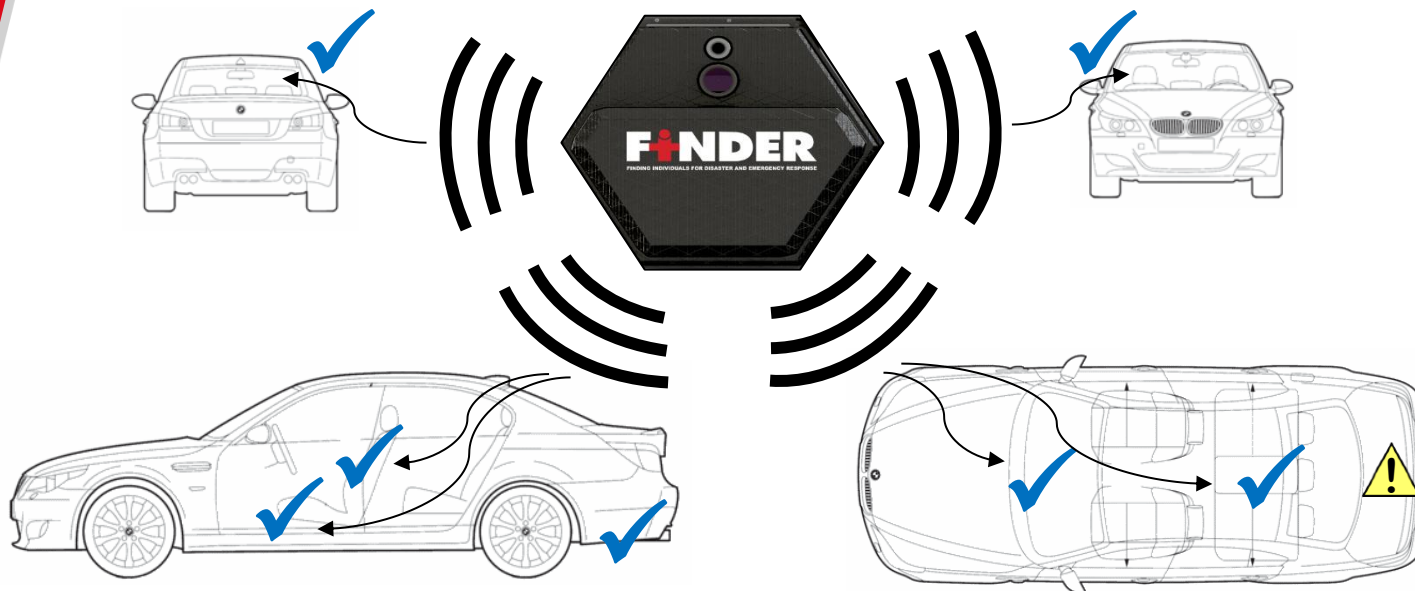
Range
10M



侵入者警備



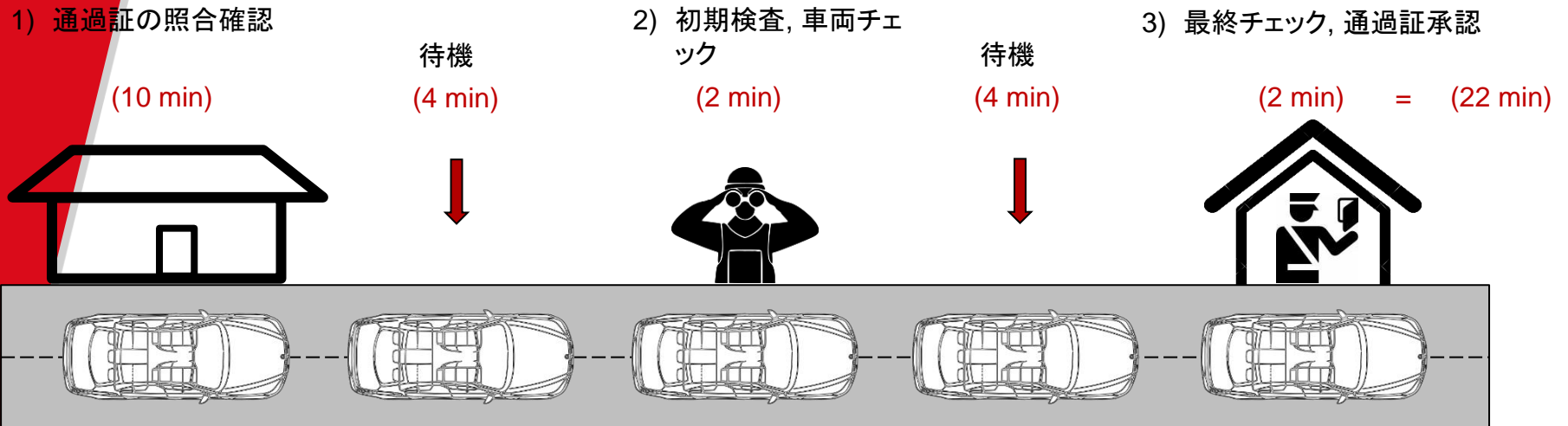
侵入者警備



車両検査

- FINDER 車内の心臓鼓動を検知
- FINDER 窓の開閉状態問わず (open or closed), 車の隙間部から検知
- FINDER パネル等の内装部も透過
- トランク非解放時には、金属による心臓鼓動の制限があり

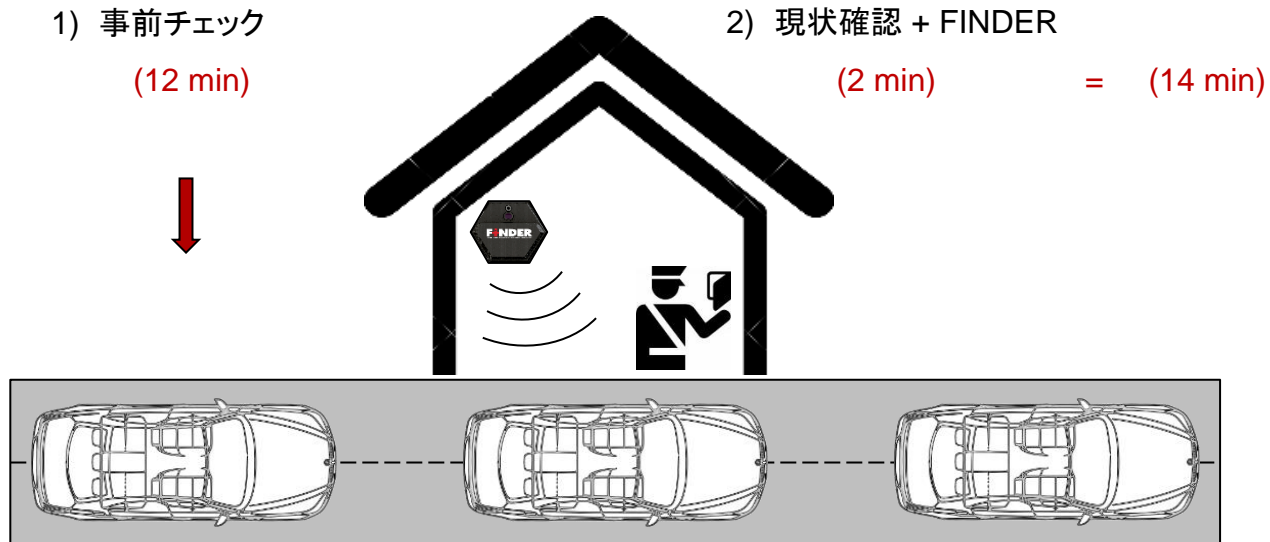
侵入者警備 - 以前



Key Take-Aways

- Entire 3 phase entry process takes approx. 22 minutes, with appx 12 minutes in vehicle
- 2nd Phase of border involves a 1-2 minute verification of passenger count and brief vehicle search
- If vehicle is a SUV, Phase 2 guard inspects through windows
- If vehicle is Sedan, Phase 2 guard inspects through windows and inside trunk
- Final phase involves final verification of passports/visas and permitted entrance into UAE

侵入者警備 - 以降



New Process

- FINDER scan added to last phase of process
- New configuration eliminates need for middle check point
- Estimated 8 minutes reduced from current process
- FINDER results compared to passport collection for further investigation as needed

製品群



Forward Thinking. Rapid Response.

現行モデル

Finder 2W

2 輪



- Extended Ground Search
- Motorcycle Integration
- Fit for Off-road Driving
- Use On or Off of Bike

Finder OC

10プロペラ
ドローン



- Miniaturized Sensor
- Aerial Application
- Octocopter Integration
- Wide Coverage Area

Finder HX

六角形



- Handheld Operation
- IR & HD Camera
- Wi-Fi Capable
- Built-in Display
- MIL-STD Architecture

FINDER HX



- ▶ **Range 10M – 30M [30M Open Space]**
- ▶ **2 時間連続運用 / 24 時間スタンバイモード**
- ▶ **45 度の照射角**
- ▶ **10 lbs.(約5kg)**

FINDER 2W



- ▶ **Range 10m – 30m [100m オープン空間]**
- ▶ **24 時間連続運用**
- ▶ **45 度照射角**
- ▶ **Off-Road トレーニング認証, メンテナンス認証**

FINDER OC



- ▶ **ペイロード: 12kg**
- ▶ **飛行時間: 15 分 / 有線無制限**
- ▶ **GPS, 自己帰還, 飛行経路プログラム**

ユーザー

ABU DHABI POLICE



US INTER-AGENCY BOARD VIDEO



まとめ

