

U.S. PACIFIC COMMAND

PACOM AIT/RFID Initiatives

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Outline

- Our goal
- Where we work
- Current RFID
 - Projects
 - Operations/Exercises
 - Updates
 - *The Way Ahead*

What's our goal?

To provide the PACOM J4 and staff with most current and accurate information regarding tracked assets throughout the AOR by using a myriad of resourced RFID technology solutions

PACOM AOR

It's where we do business



Why is PACOM important?

- Covers more than **50%** of the Earth's surface, 105 million sq. miles and traverses 16 time zones
- Contains nearly **60%** of the world's population
- 43 countries, 20 territories and possessions and 10 U.S. territories
- **35%** of U.S. trade is done in the region

RFID Projects

The Vehicle Staging Area upgrade at Wheeler AAB



Tony Jacang

About the upgrade

- Timeframe – Finished June 2007
- Service - ARMY
- Location – DTC, Wheeler AAF, Hawaii
- Purpose – 25 ID unit deployment (2nd Bde)
- Upgrade – New 25 million dollar, state of the art vehicle staging area, complete with overhead roof cover and building support of staged process steps, such as the WIM reading scale house and SignPost technology
- Goals for project
 - Improve Safety
 - Improve data accuracy
 - Improve throughput speed
 - Reduce man power requirements

Deployment Training Center



Over 2,000 RF tags were written here before being placed on vehicles/shipments for the deployment



RF Tag

Sign Post

Upgrade worth every cent

- Improved safety for soldiers and civilians alike
- Improved data accuracy and quality by utilizing new technologies
- Increased throughput speed because of faster data flow and site organization
- Exponentially reduced man power

RFID

Operations/Exercises

Cobra Gold 07'

- Timeframe – April to May 2007
- Service - USMC
- Location – Thailand
- Purpose - Track US MARFOR shipments supporting FTX (containerized and palletized shipments and RF-tagged cargo/equipment)
- Goals
 - Track real-world RFID tagged shipments into and within Exercise AO
 - Unit cargo and equipment
 - JMIDS JCTD containers
 - Track notional RFID tagged sustainment in STAFFEX

CG07 ITV/TAV

Cargo Flow

BANGKOK
JTF (Fwd/Rear)



KORAT
1 MAW
13th MEU FARP

LOP BURI
13th MEU

PRAN BURI
B(-)1-161 IN
BN HQ(-)/1-161 IN

THUNG PRONG
SPOD
SDDC
- AMMO

DAN CHAN KREM
13th MEU

UTAPAO
- STRATAIR

CHUK SAMET
SPOD
SDDC
- 13th MEU
- HSV

JOMTIEN
CTF HQ



→ Containers, Pallets, Equipment, PEI

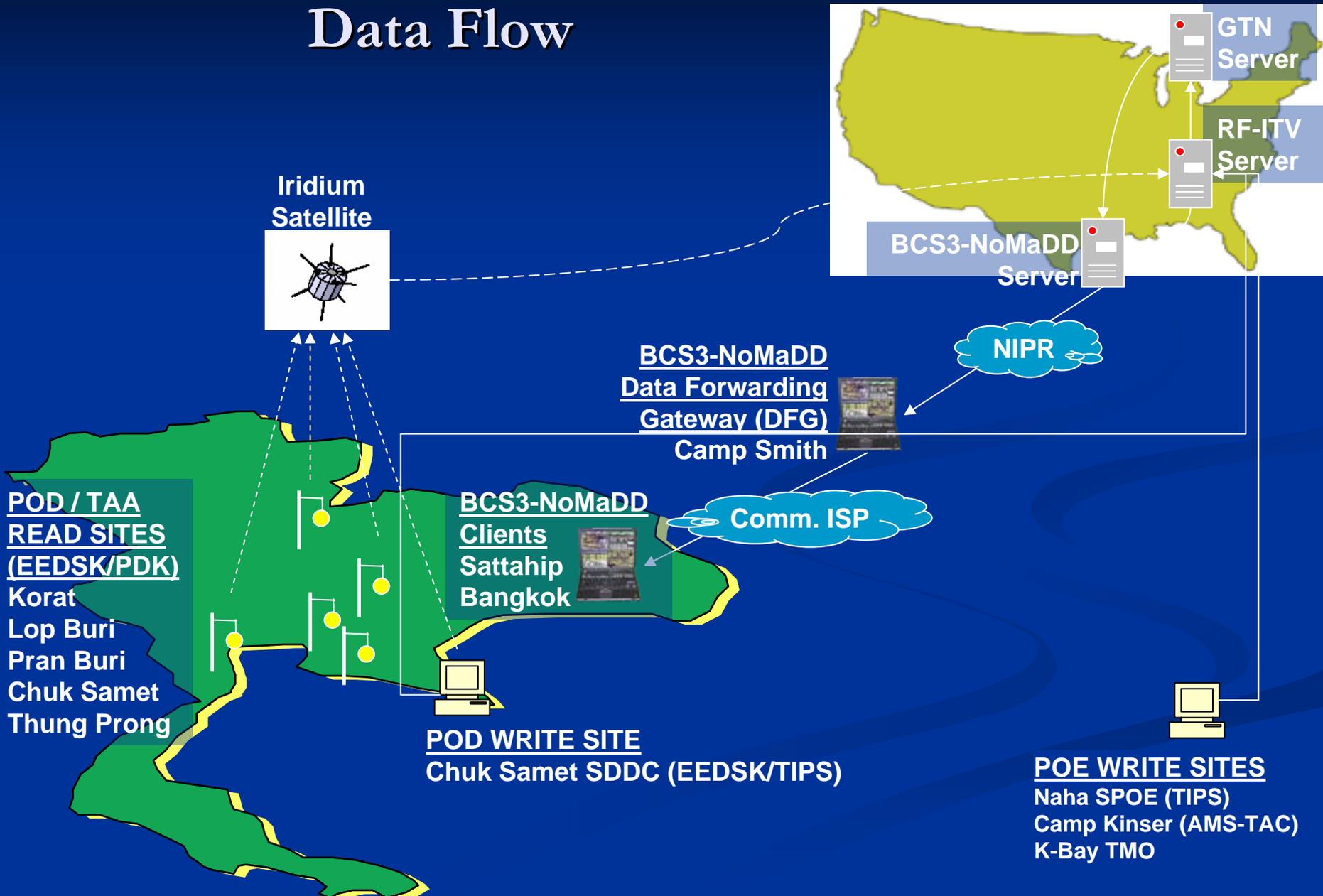
→ Ammunition



BCS3-NoMaDD

CG07 ITV/TAV

Data Flow



Cobra Gold takeaways

- Data flow from RF ITV server into BCS3/NoMaDD (Node Management and Deployable Depot) demonstrated geospatial logistics management which, simply put, is in-transit visibility of both air and sea shipments from origin to destination.
- RFID read rates nearly flawless during the exercise.

Talisman Saber 07'

- Timeframe – May to June 2007
- Service – USMC (3rd Marine Logistics Group) and Coalition Forces (Australian Defense Force)
- Location – Australia
- Purpose - Track US MARFOR, ADF and GITV shipments supporting FTX (containerized/palletized shipments and RF-tagged cargo/equipment) from Gladstone Port to Shoal Water Bay Training Area (SWBTA).
- Goals
 - Integrate cutting edge technologies and procedures that support combined and joint warfighting capabilities, exercise objectives and Combined Mission Essential Tasks (CMETs)
 - Integrate US and AS science and technology initiatives
 - Enhance Combined and Joint interoperability
 - Measurably improve Combined and Joint warfighting capability

III MEF, ADF, and G-ITV RFID INTERROGATION ARCHITECTURE - FWD

TOWNSVILLE

- MAG-12/CLC-36
- ADF
- MDC PDK

CAMP GROWL

- 3D MEB
- ADF

Camp Connelly

- MDC EEDSK

SWBTA Gate

- ADF
- GITV (pending generator)
- MDC EEDSK ?

BRISBANE

- N/A (AS NEEDED)

REST STOP

- G-ITV (North)
- MDC (South)

ROCKHAMPTON

- ADF
- G-ITV
- MDC PDK

PORT ALMA

- SDDC

GLADSTONE

- SDDC
- POG Spt
- MDC EEDSK (Bridge)



RFID Interrogators



Talisman Saber takeaways

- Demonstrated Global In-Transit Visibility via geospatial logistics (NoMaDD) by passing RF data from all tags (USMC and ADF) to their respective server which, in turn, fed NoMaDD and ultimately proved joint interoperability between coalition forces.

Turbo Cads 07'

- Timeframe – March to Sept. 2007
- Service – Army, Navy, USMC, Air Force
- Location – Australia
- Purpose - To analyze and view the visibility status of munitions carried by the vessel “Global Patriot” that were uploaded/downloaded throughout the PACOM AOR during the exercise by utilizing Radio Frequency tag data via transmission from strategically placed RF Interrogators to the RF ITV server.
- Goals
 - To determine whether or not ITV was a successful link in the TURBO CADS chain by identifying date/time stamps for all containers (inbound and retrograde) that were in transit during the exercise.

Global Patriot



TC07 "MV GLOBAL PATRIOT" Timeline

CHINHAE
30 Jun – 5 Jul
Download:
318/320 – 99%

SASEBO
24-26 Jun
Download:
83/85 – 99%

INDIAN ISLAND
23-28 Jul
Download:
534/551 – 97%

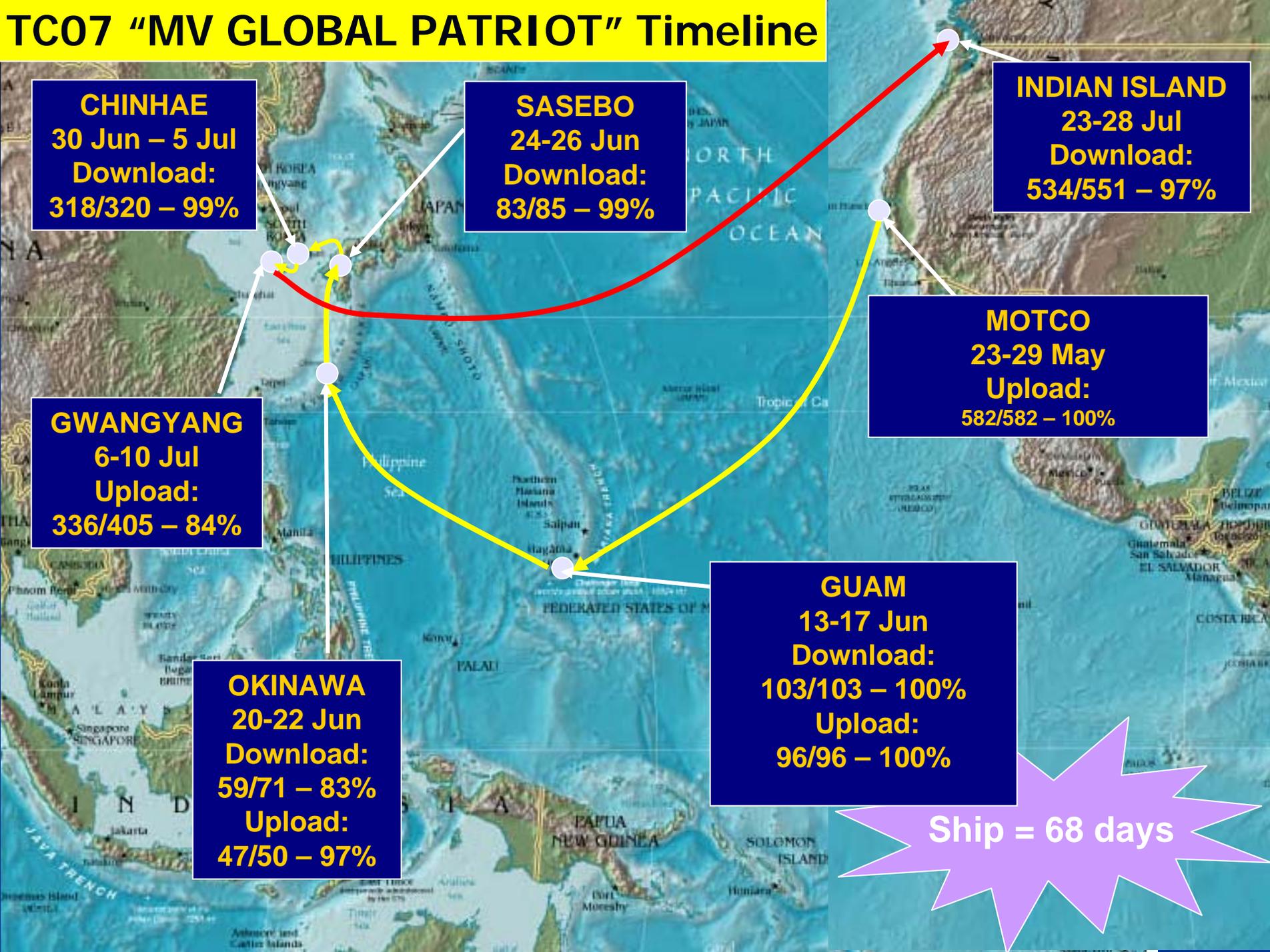
MOTCO
23-29 May
Upload:
582/582 – 100%

GWANGYANG
6-10 Jul
Upload:
336/405 – 84%

GUAM
13-17 Jun
Download:
103/103 – 100%
Upload:
96/96 – 100%

OKINAWA
20-22 Jun
Download:
59/71 – 83%
Upload:
47/50 – 97%

Ship = 68 days



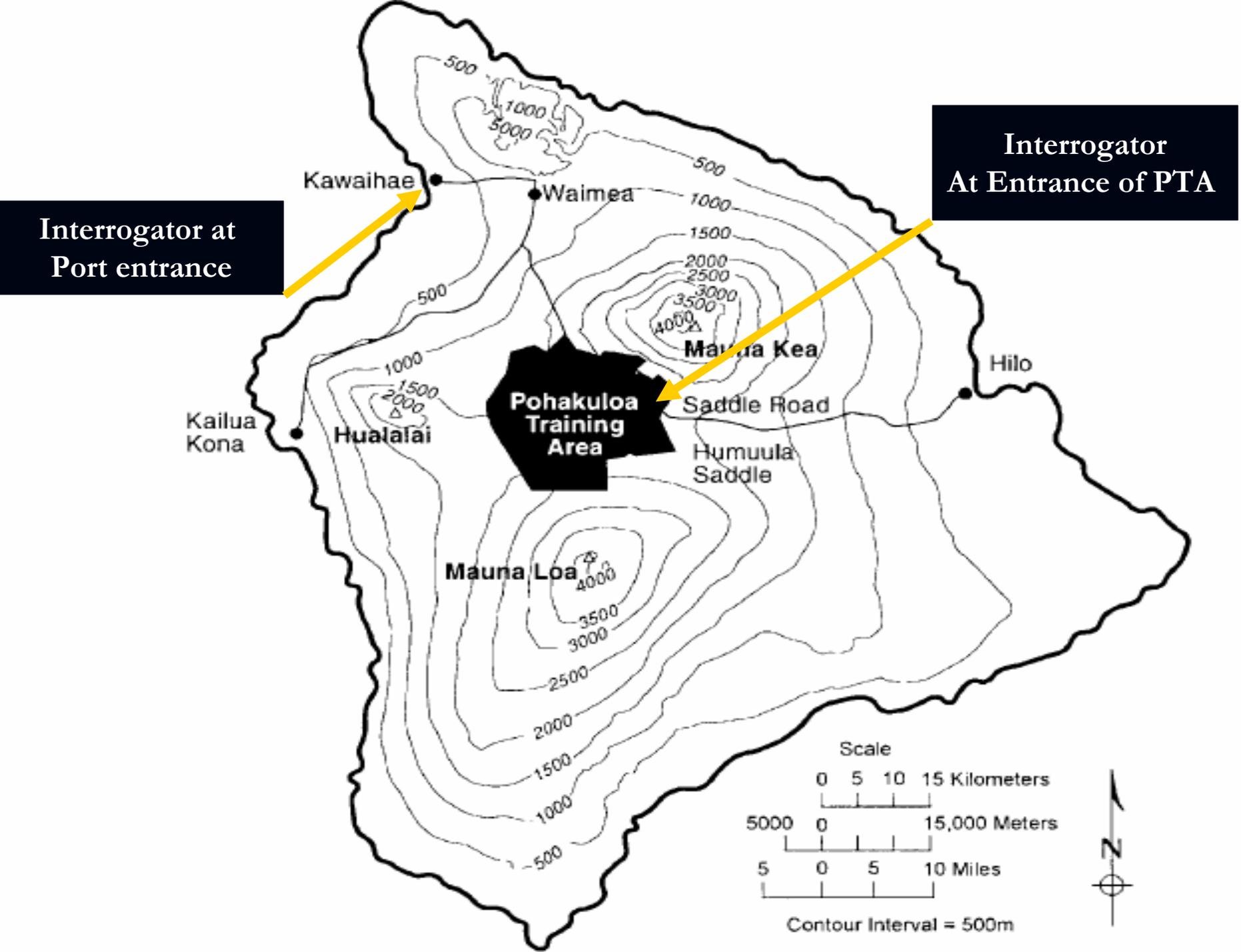
RFID Updates

Current RFID Infrastructure

- RF Interrogators By Location
 - Hawaiian Islands – 39
 - Alaska (North) – 17
 - Alaska (South) – 16
 - Korea – 97
 - Japan – 32
 - TOTAL – 201 Active Interrogator sites (this number excludes any site that is temporarily established/de-established)

New Interrogator Installations

- Pohakuloa Training Area (PTA)
- Kawaihae Port
 - Time Frame – Jan/Feb 2007
 - Location for both – Big Island, Hawaii
 - Purpose – To provide ITV coverage to soldiers who are training to deploy downrange.
 - PTA - Largest DoD installation in Hawaii.
 - Covers 109K acres and is conducive to any/all needs for military training.



PACOM Instruction 0601.6

- Timeframe – Nov. 2006 – June 2007
- Purpose – To update existing PACOM Instruction 4000.11 to reflect changes made to policy regarding AIT/RFID based directly upon business processes and/or new resources in the AIT/RFID field and are directly subject to Department of Defense policy on such.

The Way Ahead

Upcoming Interrogator Installs

- *Preparation* is under way for the Yokohama Commercial Port (APL and Maersk Sealand piers) for installation of RFID interrogators.
- *Preparation* is under way for the Aja Commercial Port (APL) for installation of RFID interrogators.
- *Preparation* is under way for the commercial port of Anchorage for installation of an additional RFID interrogator due to port expansion.
- *Coordination* and *preparation* is under way for commercial rail heads in the VIC of Anchorage and Fairbanks for installation of RFID interrogators ISO deployment and sustainment operations.

Future for PACOM RFID/AIT

- Sustain field service representation to manage RFID infrastructure (present/future)
- Continue to support exercises/operations with regard to RFID needs (i.e. Turbo Cads, Cobra Gold, etc.)
- Gather intelligence/information on technical requirements for sustaining efficient and effective means of ITV/TAV
- Test and perform with newest technologies (i.e. Signpost, Passive RFID, etc.)

Questions???