



# **SmarTrack**

**AGILE ASSET TRACKING & MANAGEMENT**



**SmarTrack**  
**AIR FORCE**

# **What is SMARTRACK!**

**SMARTRACK uses CAC cards, PIN's, IUID tags and 2D bar-coding to inventory, track, trace, account, maintain, issue and receive equipment for all critical and non critical unit property. The system produces approved forms and publications for each transaction thus providing an electronic copy of each and every system transaction. Originally designed for Arms Room Management and now used in all commodity areas.**

***Go Ahead and Make it Easy!!***

## Who We Are

- Based in Raleigh NC
- Small Disabled Veteran Owned Business
- Mainly a custom software design firm

## What We Do

- Design Custom Effective Software and Hardware Solutions
- Specialize in Asset Management

# Fundamental Issue

**How can a commander?**

**Assign individual and command responsibility for equipment using current technologies such as CAC Cards and IUID tagging to enhance:**

- **Accountability**
- **Life Cycle Management**
- **Asset Management**
- **Maintenance Tracking**
- **Inventory and Management Control**
- **Reduce and Eliminate Paper Transactions**
- **Increase Training and Personal Time**
- **Add Value to Every Unit Member**
- **Provide Portability and Flexibility**

# Challenge

## UNIT COMMODITY ROOMS

Paper Based

1 Soldier

50,000  
TRANSACTIONS

- **Slow & Inefficient**
- **Inaccurate – lost equipment**
- **Not Responsive (Joint/Allied OPNS)**
- **Lacks standardization**
- **No connectivity**
- **“Antiquated”**

300  
Customers

10,000  
Maintenance  
Services

520  
Inventories

2-3000  
Items

# Solution

## SMARTRACK “Asset Tracking System”

**Fully  
Automated**

**Data Base  
Management**

**Portable &  
Flexible**

**Virtual  
Management**

# Product Versions

- SmarTrack US Air Force
- SmarTrack USMC
- SmarTrack US Navy
- SmarTrack US Army
- SmarTrack Drug Enforcement Administration (DEA)
- SmarTrack Advanced Maintenance
- SmarTrack RFID
- SmarTrack Warehouse



# What is SmarTrack

## Asset Tracking and Management

Track, Trace,  
Maintain,  
Inventory, Account

Enter  
Equipment

Bar Code  
Equipment

Assign  
Equipment to  
People or Places

Enter  
Personnel

Assign  
Equipment

Assign  
Maintenance  
Data

# SmarTrack Digital Arms Room And Asset Tracking System

## Current Services Served



US Army  
500+  
Stand Alone  
3  
Server Based



US Marine Corps  
1+ Installations  
Server Based



US Air Force  
10 Installations  
Stand Alone



# SmarTrack Digital Arms Room And Asset Tracking System

## Levels of Unit Installations



Individual  
Companies  
Flights



Battalion  
Group Level



Group Level



# SmarTrack Digital Arms Room And Asset Tracking System

## Types of Installations



Arms Room



Commo Room  
Supply  
SCIF



# SMARTTRACK FOOTPRINT

Arms Rooms

Supply

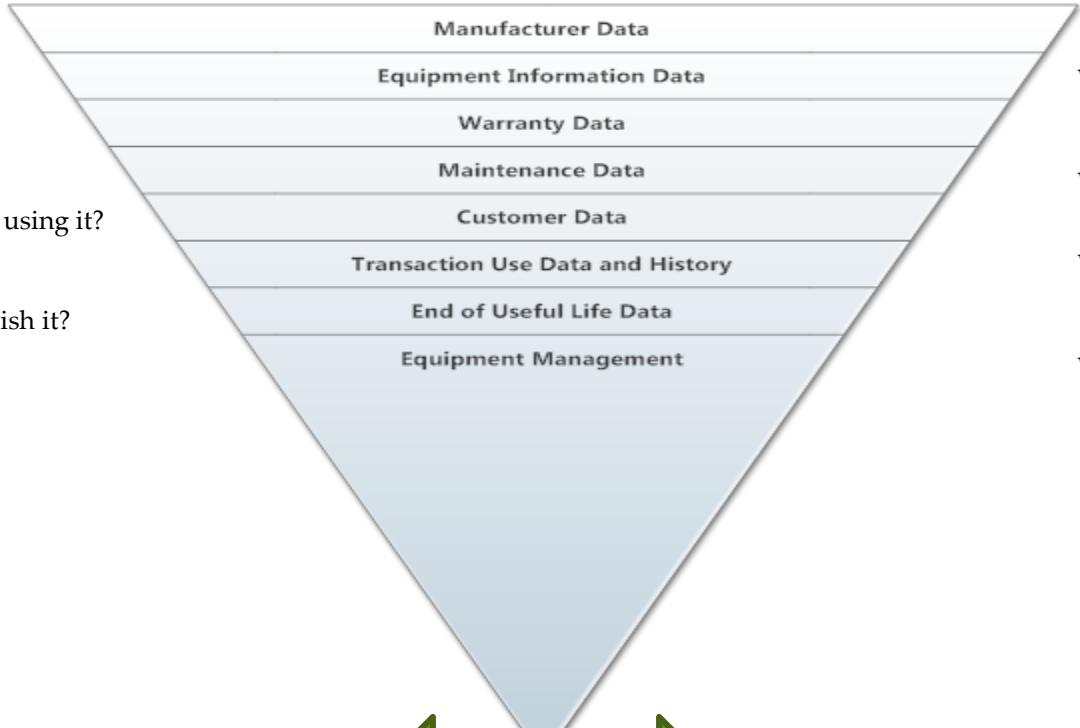
IT

Tool Room



# Asset and Life Cycle Management

## Equipment and Personnel



Where did it come from?

Product support?

Where is it assigned, who is using it?

When do we retire or refurbish it?

What is it?

When and how do we maintain it?

What is its use history?

What is its current status?

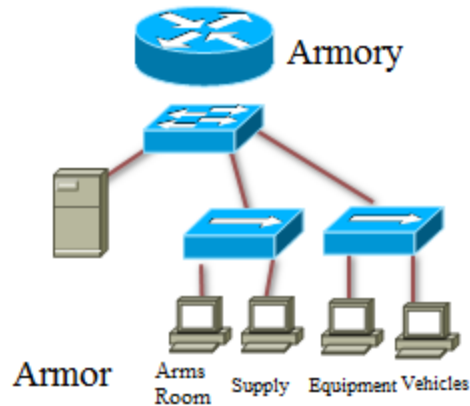
Retire

Recycle

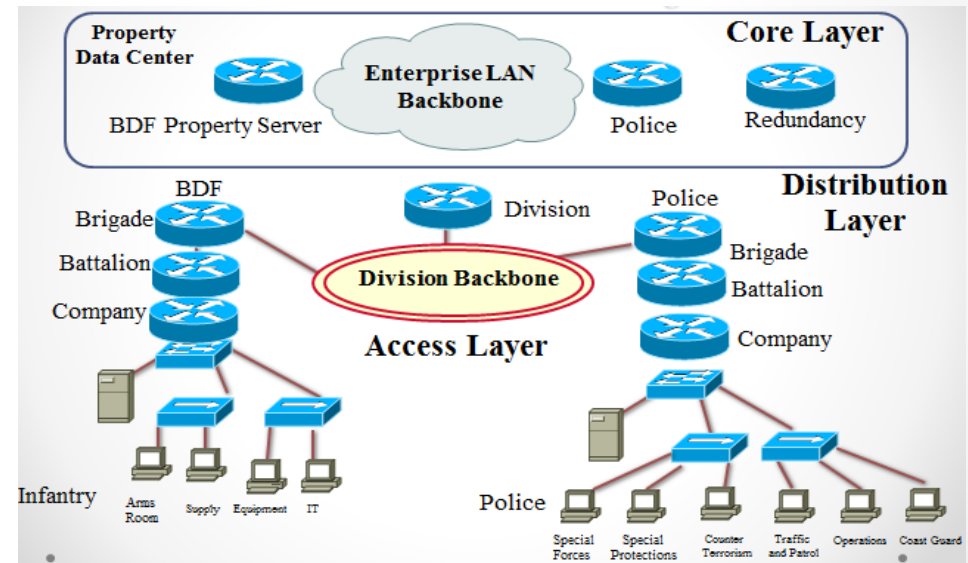
Accountability and Accuracy

# Scope of Possibilities

## Small Local Operations

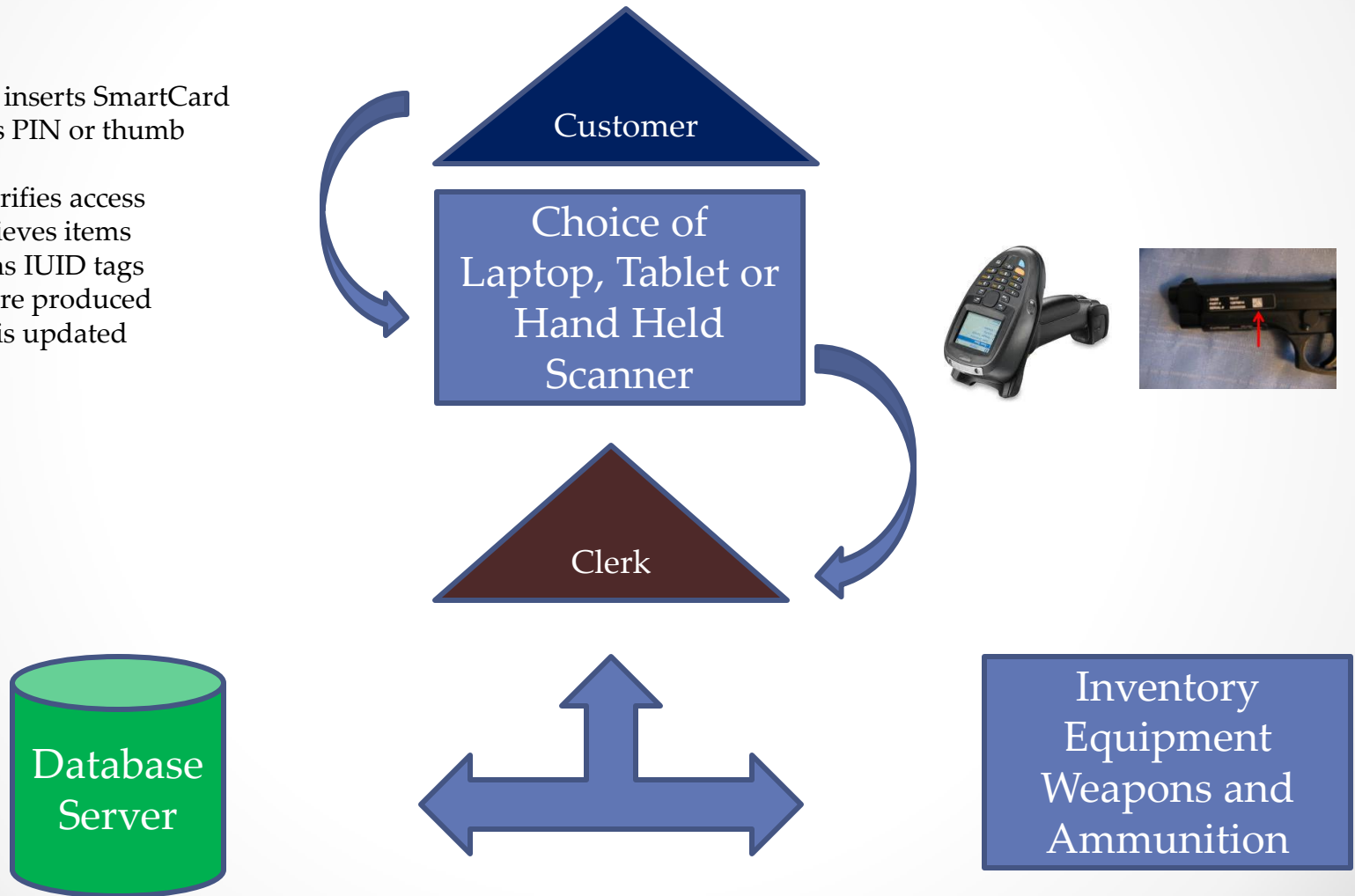


## Enterprise Level Asset Management Solution



# Basic Operation

1. Customer inserts SmartCard and enters PIN or thumb print
2. System verifies access
3. Clerk retrieves items
4. Clerk scans IUID tags
5. Receipts are produced
6. Database is updated





# Example Physical Architecture

Main equipment property data base servers  
Managed by highest level property management office



Intermediate equipment property limited data base sever  
Managed by intermediate level property management office



Front line equipment property management  
Managed by local clerk



Smartcard



Weapons



Ammo

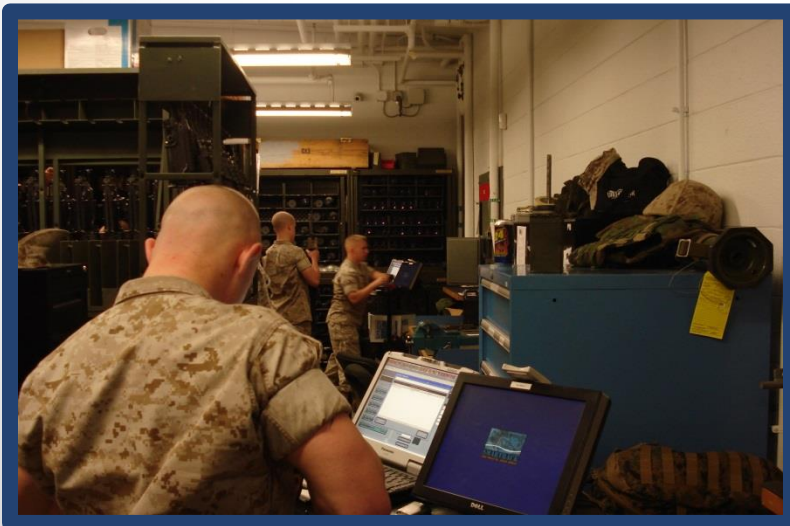
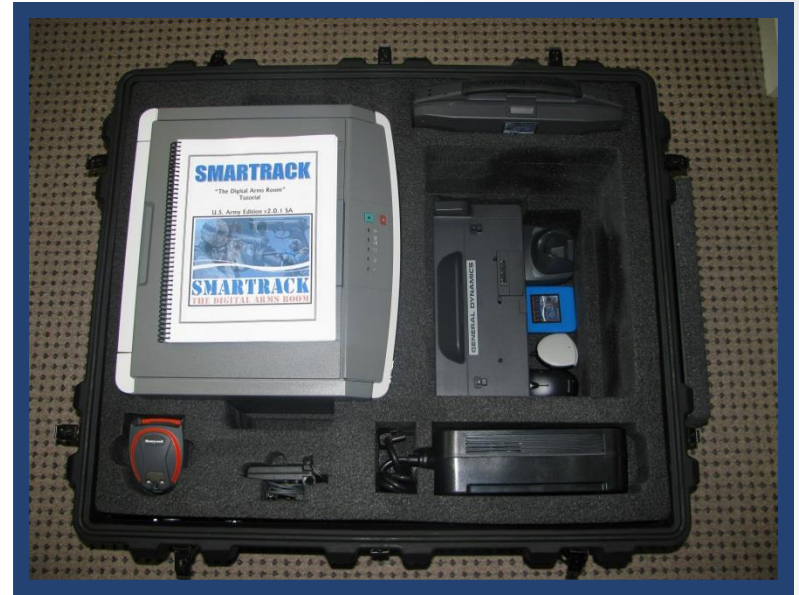
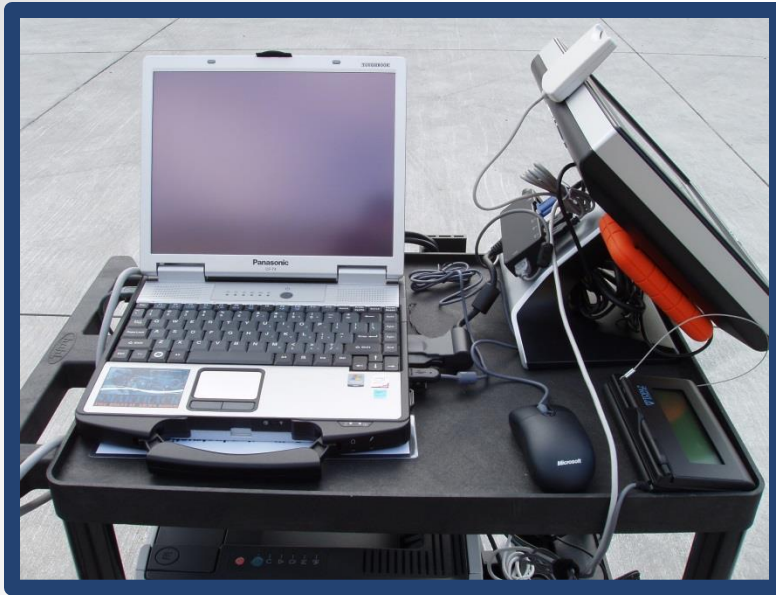


Clothing



Vehicles

# SmarTrack In Action



# Hardware Options

## PC Based



## Tablet Based



# Product Features

Heads Up Display

Master Authorization List

Hand Receipts Management

Personnel Page

Issue & Turn In

Checked Out Items Page

Maintenance

Inventory

Reports and Queries

Training Statistics

Ammo Storage

Key and Lock Control

Forms and Publications Library

Parts Manager

Kit Design

Bulk Items

Property Book Interface

Packing List Design

# What's Included

## Hardware

- Laptop
- Duplex Printer
- Touch Monitor
- Wireless Scanner
- Signature Pad
- CAC Card Reader
- UPS
- A/V Cart
- Back Pack
- Back Up Drive

## Software

- **Windows 7 Pro**
- **SMARTRACK 3.0**
- **SQL db**

## Installation & Training

- **1 on 1 Instruction**
- **1 week training on site**
- **Data Migration**
- **Bar Coding**
- **Installation**

\* See vendor for multi purchase discounts

# Product Support

One Call, One Answer, Problem Solved!!

- 3 Year 24 hour replacement for all hardware
- 24/7 tech support
- No need for Air Force maintenance and support, it's included
- All items adjust to local electricity

# Unique Identification Tagging

## SmarTrack reads:

- 1D Bar Codes
- 2D Bar Codes
- Data Matrix Tags
- DOD IUID Tags

**TESA IUID Labels:** TESA IUID labels are a special durable label. They are designed and printed by many defense contracting companies or may already exist on government equipment. Each serial numbered item is assigned a construct 1 or 2 UID number that is unique to that piece of equipment. The IUID information is reported to the Wide Area Work Flow WAWF and the labels are then shipped to the property custodian and applied to each piece of equipment. Each surface is cleaned with a cleaning solution before the label is applied. An overcoat is then sprayed over the label to increase the durability. IUID Labels are not included with the SmarTrack system purchase. Williams Software does offer IUID services and solutions.



M9 Pistol with IUID TESA Label



SCAR Rifle with OEM TESA Label



TAC Light with TESA Label



M4 Rifle with IUID TESA Label

TESA IUID Labels



Scope with IUID TESA Label



**Metal Photo IUID Labels:** Metal Photo IUID labels are a special durable metal label. They are designed and printed by many defense contracting companies or may already exist on government equipment. Each serial numbered item is assigned a construct 1 or 2 UID number that is unique to that piece of equipment. The IUID information is reported to the Wide Area Work Flow WAWF and the labels are then shipped to the property custodian and applied to each piece of equipment. Each surface is cleaned with a cleaning solution before the label is applied. An overcoat sprayed is sprayed over the label to increase durability. Metal Photo IUID Labels are not included with the SmarTrack system purchase. Williams Software does offer metal photo IUID services and solutions.



M9 Pistol with IUID Metal Label



Shotgun with IUID Metal Label



M4 Rifle with IUID Metal Label



Shotgun with IUID Metal Label

# Air Force Insert Specifics

- **Uses Air Force CAC and PIN**
- **Automated Air Force Forms such as AF 1297, 105, 629**
- **Air Force Manuals and Regulations**
- **Air Force Inventory Procedures**

# System Capabilities

# Heads Up Display

- **Expired ETS and DEROS/PCS**
- **Check Out Status off all equipment and ammo**
- **Overdue maintenance items**
- **Ammo storage expiration**
- **Maximum rounds fired notification (80-100 percent)**
- **Readiness rating alerts for non-mission capable systems**
- **Required reports and inspections**

# Master Authorization List

- Core elements of data base, visual status icons, real time decision making tool
- Visual indication of what is: assigned, un-assigned, checked out, non-mission capable, and round count status
- Facilitates drag and drop changes
- Lists required MAL Items, Property Book Info, Personnel Info, checked out items detail, and bulk items tracking
- Prevents the assignment of non-mission capable equipment
- Bundles equipment (connects machine gun, spare barrels, spare bags, scopes and aiming device as a set)

# Property Book

- **Inventory and Reconcile Property and Sensitive Items Inventories against property books such as PBUSE**
- **Accurate property book of all arms room equipment down to assigned level by team, squad, platoon and company**
- **Prints property books for leaders at each level showing what they their unit is responsible for**
- **Includes quantity authorized, on hand, LIN, SUB LIN, NSN, Nomenclature, Type to include POW's**

# Personnel Page

- **Fills authorized personnel database with CAC cards to include signature**
- **Allows drag and drop assignment of personnel to teams, squads, sections and platoons**
- **Identifies do not issue personnel (court marshal, suicide watch etc.) from drawing equipment**
- **Allows assignment of attached personnel**
- **Prints personnel reports by team through company level**
- **Lists all equipment assigned and unassigned that is check out of the system**

## Issue & Turn In

- CAC Card issue with PIN Verification
- Prevents issue of non mission capable equipment
- Prevents issue of equipment to the wrong individual
- Prevents issue to Lautenberg Act personnel
- Generates instantaneous AF1297/Equipment Sign Out Log
- Eliminates armorer transcription errors
- Speeds the issue & turn-in
- Provides historical equipment data
- Tracks Rounds fired/Rounds remaining



Turning in and Issuing equipment is conducted in a fraction of the time it used to take. All forms such as the Air Force Forms 105, 629, 1297, 1473 and SF 153 are automatically populated and printed while instantly updating the MAL in real time. Security is vastly improved through the use of the Smart Cards and personnel identification numbers.

Unique features such as rounds fired tracking, issued items reports and personnel issue restrictions allow the user to customize the system to fit the organization. SMARTRACK® Air Force adapts to the organizational structure and requirements of the US Air Force.

The screenshot displays the SMARTRACK® Air Force software interface. At the top, there is a navigation bar with icons for HUD, MAL, Check In/Out, Ammo In/Out, Airman, Equipment, Inventory, Maintenance, Inspection, Reports, Forms Library, System, Help/Info, and Log Out. Below this is a window titled 'Check In/Out | AF IMT 1297/AFZP 2015'. The main content area is a 'Report Viewer' window showing a report for 'AF IMT 1297/AFZP 2015'. The report includes a signature line, a table of issued items, and a table of equipment details.

**Report Viewer**

Page Width: 1/2 | Backward | Forward | Refresh | Save as PDF

*I acknowledge receipt of and responsibility IAW AF 23-111 for items described below and will return them by the return date indicated.*

ISSUED TO: SIGNATURE		DUTY PHONE	ISSUED BY Sys Administrator	
ISSUED TO: NAME, GRADE, ORGN (Type or print) Tom Brady - E8-SMS		ORGN ACCT NO.	DATE OF ISSUE 8/6/2012	RETURN DATE 12/4/2012
STOCK NUMBER	DESCRIPTION OF ITEM	U/I	QNTY	
6625-01-266-3494	8025B - Multi-Meter	EACH		
	ART318, L0990			2
6130010896467	B-9 - POWER SUPPLY	EACH		
	140			1
5810-00-434-3644	KY-57/TEC/0014 - Crypto	EACH		
	25945			1

## Checked Out Items Page

- **Real time checked out items tracking**
- **Shows who equipment is assigned to, who actually checked it out and for what reason equipment was checked out**
- **Query by reason, unit (team- company), by person and by type of weapon**
- **Constantly updates equipment counts for all items on property book**

# Maintenance

- **Automates scheduled maintenance tasks**
- **Maintains a real-time AF form 103 for the user**
- **Tracks round counts and populates records for all round counts and maintenance tasks**
- **Maintains maintenance history records for all equipment**
- **Notifies armorer when gauging and calibration is due**
- **Notifies armorer when organizational and user maintenance is due**















Conduct scheduled and un-scheduled maintenance with ease. With automatic maintenance scheduling maintenance is no longer a monumental task. All maintenance requirements are automatically presented to the user, applicable forms are auto populated, maintenance statuses are then tracked from beginning to end to include parts and repair warranty services, ordering and off site maintenance tracking.

The system produces useful maintenance status reports for all of your equipment to provide the organization's leadership with additional decision making tools for mission planning.

Equipment	Assigned	Deadlined	Available	% Available
532-A1	9	0	9	100%
8025B	3	0	3	100%
AN/PAS-21 See Spot III	16	0	16	100%
AN/PEQ-1C Laser Marker	10	0	10	100%
AN/PRC 148	31	0	31	100%
AN/PRC-117F	14	0	14	100%
AN/PSN-13A	8	0	8	100%
ANC/PRC 117 G	6	0	6	100%
ANPVS -7D	42	0	42	100%
AV 2055/UHF SATCOM ANTENNA SYSTEM	11	0	11	100%
B-9	1	0	1	100%
BNVD-3G	6	1	5	83%
CHARGER, BATTERY	4	0	4	100%
Dummy Load	1	0	1	100%
ELECTRIC COUNTER	9	0	9	100%
FRS/MS-200M Light Marker Distress IR	10	0	10	100%

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INSPECTION MAINTENANCE FIRING DATA FOR GROUND WEAPONS				1. WEAPON TYPE: RIFLE MODEL: M4A1 CALIBER: 5.56 MM			2. SERIAL NUMBER W123456789		3. MANUFACTURER COLT				
4. WEAPON LOCATION UNIT						5. ORGANIZATION 1ST AIR WING							
CONDITION A	ACTION TO BE TAKEN B	REMARKS C	INITIALS D	DATE OF INSP E	CONDITION A	ACTION TO BE TAKEN B	REMARKS C	INITIALS D	DATE OF INSP E				
U	V	Missing Parts	ALW	20120714									
V	V												
V	V												
V	V												

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MAINTENANCE RECORD				PART IV FIRING RECORD					
PART II FAILURE RECORD				DATE	TOTAL FIRED	CUMULATIVE TOTAL	DATE	TOTAL FIRED	CUMULATIVE TOTAL
PART NUMBER	REMARKS	DATE REPLACED	INITIALS	A	B	C	A	B	C
348723984723948	Pin Retaining Replaced	20120714	ALW	20120701	5	5			
				20120704	5	10			
				20120705	10	20			
				20120707	100	120			

# Inventory

- **Automated daily, monthly, property book and command directed inventory**
- **Provides for 100 percent accuracy of all arms room equipment**
- **Conduct inventories from multiple locations**
- **Verifies inspectors minimum rank and ensures non consecutive monthly inspector**
- **Inventory by type, status, location and more**
- **Instant comparison to master data base**
- **Conduct cyclic, 20 percent and other types of inventory**

SMARTRACK® Air Force provides the ability to conduct daily, monthly and on demand equipment inventories in less than 30 percent of the time it used to take saving you hours of work. Inventories provide you with valuable information such as world wide asset location, authorized and on hand quantities, check in and out details, owner and user data and maintenance status.

Inventory reports are automatically produced, reconciled and stored into history. Inventory is conducted by specialized tagging and scanning devices which allow for batch and real inventory that can be conducted in real time or saved for transmission at a later point in time

The screenshot displays the SMARTRACK software interface. At the top, there is a menu bar with icons for HUD, MAL, Check In/Out, Ammo In/Out, Airman, Equipment, Inventory, Maintenance, Inspection, Reports, Forms Library, System, Help/Info, and Log Out. Below the menu bar, the window title is "MAL Assign to Airman Unit Inventory". On the right side of the window, there are buttons for "Done", "Start Scanning", and "Save".

The main area of the window is divided into two sections. The left section is titled "Choose Inventory" and has a dropdown menu set to "Monthly". Below this, there is a header for "Inspector - Sys Administrator" and "Unit - 200TH ASOS". Underneath, there is a table titled "Unscanned Equipment" with columns for Equipment, Type, NSN, Rack #, Serial #, and Bar #. The table contains 20 rows of equipment data.

The right section is a dialog box titled "Scan Items to be counted in Inventory". It has a header for "Scanned items" and a table with columns for "Item" and "Serial Number". The table contains 4 rows of scanned items.

Overlaid on the bottom right of the scanned items dialog is another dialog box titled "Scan Count!". It has a table with columns for "Equipment Name" and "Quantity Scanned". The table contains 4 rows of scanned items. Below the table, there is a label "Total Items Scanned:" followed by the number "4". At the bottom of the "Scan Count!" dialog are buttons for "Print" and "Exit".

At the bottom of the main window, there is a "Key:" section with three items: "Unscanned" (represented by a red dot), "Checked Out" (represented by a blue dot), and "Scanned" (represented by a green dot). The total unscanned items are listed as 691.

Equipment	Type	NSN	Rack #	Serial #	Bar #
Load Bank	TEST ...	61500...	BAY	1137	D1T...
B-9	POWE...	61300...	Bay	140	D1T...
Dummy L...	TEST ...	59850...	BAY	165	D1T...
VRC-83 A...	TEST ...	66250...	BENCH	AA0026	D1T...
8025B	Multi-...	6625-0...	Bench	ART318	D1T...
8025B	Multi-...	6625-0...	Bench	L0990	D1T...
AN/PRC-1...	RADIO	5820-0...	Cage 1	2590	D143...
AN/PRC 148	RADIO	5811-0...	Cage 1	550395	A802...
M19 BINO...	BINOC...	1240-0...	Cage 1	A802539	A802...
M22 BINO...	BINOC...	1240-0...	Cage 1	A802540	A802...
M22 BINO...	BINOC...	1240-0...	Cage 1	D1TZJ40X7...	D1T...
M22 BINO...	BINOC...	1240-0...	Cage 1	D1TZJ40X7...	D1T...
M22 BINO...	BINOC...	1240-0...	Cage 1	D1TZJ40X7...	D1T...
M22 BINO...	BINOC...	1240-0...	Cage 1	D1TZJ40X7...	D1T...
PLRF 15C	LASER...	NA	Cage 2	000462	DS7...
SMP-1000	Beacon	N/A	Cage 2	00576	A802...
SMP-1000	Beacon	N/A	Cage 2	00589	A802...
SMP-1000	Beacon	N/A	Cage 2	00593	A802...
SMP-1000	Beacon	N/A	Cage 2	00614	A802...

Item	Serial Number
PLRF 15C	000462
SMP-1000	00576
B-9	140
Dummy Load	165

Equipment Name	Quantity Scanned
B-9	1
Dummy Load	1
PLRF 15C	1
SMP-1000	1

Total Items Scanned: 4



## Reports and Queries

- **Facilitates chain of command reporting**
- **Non-mission capable reports for all equipment. Report provides dead lined items, where they are, how long they have been in maintenance, when they are due, and reason**
- **Query weapons systems readiness reports for all equipment**
- **Instantly prints weapons cards through drag and drop function**

# Commanders Reports Sampler

Report Name	Use
Company Equipment Quick Count	Snap Shot of all unit equipment, what should and should not be in the arms room
Company Personnel Report	Lists all authorized users, 90 day ETS, PCS notification, and do not issue personnel
Condensed MAL	Shows required commanders information to comply with AF Regs
Arms Room Property Book Listing	Shows all equipment similar to PBUSE with additional info such a rack/butt number and actual number currently in arms room
Monthly Serial Number Inventory	Lists all equipment on property book, items scanned, items checked out, reason out and whom currently has the equipment
Ammunition Storage Report	Lists all ammo being temporarily stored, with info on who turned ammo in and out of arms room
Physical Security Inspection Report	Displays physical security inspection results
Issued and returned Items Reports	Displays all information by unit, sub unit or individual on all equipment checked in and out of the arms room in real time
Deadline Deficiency Report	Lists all deadline items and the deadline deficiencies for each item
Deadline Downtime Report	Lists all deadline items and provides information on how long items are dead lined and shows all ordered parts to include due in info
Maintenance Readiness Report	Provides readiness ratings for all equipment types
Scheduled Maintenance Report	Allows armorer to query scheduled maintenance
Unqualified and untrained reports	Provides information on all unqualified individuals and crews

# Training Statistics

- **Track qualification, hits, qualification levels, next qualification date, by individual and crew served equipment**
- **Provides qualification reports by team through company**
- **Assists leaders with proper personnel assignment**
- **Query upcoming qualification requirements**

# Ammo Storage

- Provides inventory ability for temporary storage of ammo
- Produces appropriate paperwork for the transaction
- Automatic notification of past due storage dates

# Key and Lock Control

- **Reminder of inspection dates**
- **Reminder of key and lock rotation dates**
- **Provides digital key control register**

# Forms and Publications Library

- **Supplies local drive and web based static and fill-in forms that apply to the arms room**
- **Contains all Regulations, Technical Manual and Field Manuals that apply to the arms room**

# Property Book Interface

- **Fill the SmarTrack database using the Property Book excel export feature**
- **Conduct reconciliation of the monthly inventory between the property book and SmarTrack**
- **Provides discrepancy reports between the two systems**

## Self Inspection

- Prepares unit arms rooms for internal and external inspections
- Inspection forms can be tailored to specific unit



# Kit Design

- **Design kits**
- **Assign kits**
- **Allows units to design kit for individual and crew served weapons, optics and lasers**
- **Allows units to design kits for mission specific purposes**
- **Design BII tracking kits**

## Bulk Items

- **Track bulk items included or not included on property book**
- **Inventory and track bulk issue items separately from property book items**
- **Improve accountability of the little things that degrade the mission when missing**

# Packing List Design

- **Design shipping and packing lists on DD Form 1750**
- **Design shipping containers, boxes within shipping containers, scan all items into boxes and assign master barcodes per box**
- **Auto produce DD Form 1750 for each box and overall container**
- **Inventory by box and container**
- **Produce property book listing for each box and container**

## Due Date Notification

- **System tracks each items return date**
- **System notifies clerk of any items not returned on time**
- **System alerts during start up and shut down**

# Portability

- **System comes with its own DoD custom shipping container**
- **System has been deployed to Iraq and Afghanistan on several deployments with multiple systems on their second rotation**

# Contact Information



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