Barcode Pilot Trip Report

Start Date: August 10, 2009

End Date: September 8, 2009

By: Gina Bald, Deputy Project Manager

September 10, 2009

Background

The I-Suite Project was tasked by Mary Ann Szymoniak, Branch Chief - Incident Business Practices, to introduce barcode technology in the Supply and Communication Units at incidents. The effort was timed to coincide with the implementation of the Interagency Cache Business System Re-engineering (ICBS-R) Project at the National Interagency Incident Support Caches. ICBS-R utilizes barcode technology for labeling cache supply items.

The intent of the Barcode Pilot was to test with an Incident Management Team (IMT) from a Geographic Area where ICBS-R is implemented in order to test the import of Packing Lists and the scanning of barcode labels on cache items. Two IMTs were pre-identified who agreed to participate in the Proof of Concept of barcodes, equipment and business processes: California CIIMT1 (Jerry McGowan, Incident Commander) and California CIIMT2 (Bill Molumby, Incident Commander).

The San Dimas Technology and Development Center assisted in determining scanners and barcode media.

Barcode Pilot Team members:

- Gina Bald, I-Suite Deputy Project Manager
- Donna Tate, I-Suite Project Lead
- George Broyles, Fire Project Leader, San Dimas
- Dave Haston, Senior Project Leader, San Dimas
- Hallie Toews, Contractor, RTL
- Marcus Medina, Assistant Manager, Prescott Fire Cache
- Tom Sacher, SabiOso, I-Suite Development Contractor
- Mark Paskett, SabiOso, I-Suite Development Contractor

The team developed 'Smartbooks' to be used for scanning NFES items (See Attachment A). These were refined at each incident for ease of use in searching for common items and adding additional items and common item names.

The team, software, and equipment were ready for deployment on August 3, 2009.

Assignments

La Brea Incident

On August 9, California CIIMT3 (Jeanne Pincha-Tulley, Incident Commander) was mobilized to the La Brea Incident, Los Padres National Forest. Due to the fact that CIIMT2 was committed to British Columbia (Pilot Team unable to join the assignment) and CIIMT1

was off rotation, the Pilot Team was asked if they would like to test on this incident. The Pilot Team arrived at La Brea ICP on August 10 and departed August 23. Pilot Team members mobilized:

- Donna Tate (arrived August 10, departed August 23)
- Gina Bald (arrived August 10, departed August 23)
- Dave Haston (arrived August 10, departed August 12)
- Hallie Toews (arrived August 11, departed August 23)
- Marcus Medina (arrived August 18, departed August 23)
- Tom Sacher (arrived August 10, departed August 19)
- Mark Paskett (arrived August 13, departed August 22)

The IMT had located the Supply Unit within line of sight for successful connection to the I-Suite Server. This is a milestone since the location of the Supply Unit is a major risk for using I-Suite.

The Pilot Team was ready to start August 11 at 0600. Information on the Pilot was included in the Incident Action Plan (IAP) for August 11 and as a handout (see Attachment B). Two computers, 2 handheld scanners, and a printer were set up at the front supply table. An additional computer and scanner were set up in a pilot team work area. The manual paper system was run concurrently with the automated process for contingency purposes. It was decided to issue Incident Barcode cards in the Supply Unit. This decision was based on the facts that not all resources would be issued supplies and that supply computers were set up before check-in computers (Contract computers were delayed). Cards were returned to the Supply Unit when a resource demobed and the ICS-221 Checkout Form signed by the Supply Unit Leader or Receiving and Distribution Manager. At the time of demob, I-Suite was used to verify that trackable or durable items were returned. Resources were very excited about participating in the barcode pilot and proactive in presenting their card(s).

Notable Successes

A major finding during this assignment is the value of the packing list import of Cache shipments. The packing list is generated when the delivery is enroute and uploaded to a secure ftp site. The incident downloads the file and imports into I-Suite. The imported packing list provides property numbers for trackable property items. Once the order is physically received, the inventory can be reconciled and checked into I-Suite. The Supply Unit selects a resource, scans the barcode on the container of the trackable item, associates the resource to the item, and produces a waybill. This could replace or enhance the current T-Card system. I-Suite produces a report that can be used to identify the status of all trackable items (issued, ready for issue, and what has been returned to the Cache). This is especially beneficial for chainsaw kits, Mark III pumps, etc. When a resource is demobed, their ICS-221 is flagged that the resource has outstanding supply items. A notification of outstanding items also occurs when payment documents are processed. This could be very valuable to the Procurement Unit for contracted resources.

The second notable finding was the verification of Resource Request Number, Agency, Contactor, and Resource Type. Some resources did not know their request number or else

provided an incorrect request number. The I-Suite database and/or the Incident Barcode Card were successfully used to verify the information.

Other positive findings:

1. In the future, no need to functionalize resources at the front Supply table by having an Overhead, Equipment, or Crew supply line. I-Suite can access all resources.
2. Ability in I-Suite to create 'Locations' (i.e., Medical, Fire Info, White Oak Spike Camp), issue supplies to these locations rather than to an individual, and produce a Waybill for trackable items assigned to location(s).
3. Ability to produce Waybills for trackable property and have resource sign for item.
4. The SabiOso developers' presence at the incident proved invaluable to fix and test problems/bugs quickly and gather requirements on the spot. (See Attachment C)
5. Gamal Awad, South Operations Supply Cache Manager, visited the incident and spent time with the Pilot Team discussing the packing list import, ICBS-R barcode labels on boxes received from the cache, and how the two projects can continue working together on barcodes.
6. Handheld scanners held up during the incident despite the dusty environment.
7. Smartbooks worked well and enabled the Camp Crew to quickly find and scan items.
8. NFES items with ICBS-R barcode labels were quickly scanned and associated with a resource. Property numbers included in the barcode aided in assigning correct property numbers to a resource or location.

Limitations or Special Needs

1. Upon arrival, it was discovered that power was unavailable to the Supply Unit. This was taken care of by late evening with generators.
2. During the incident, the generators were taken down three hours for maintenance. A contingency plan is needed for when power is lost. The manual paper process continued and trackable items were noted and entered into I-Suite when power was restored.
3. I-Suite Server Setup – Need a plan of action of issuing supplies manually until server is ready
4. Timeliness of setup of network and computers/equipment to Supply Unit – Need dedicated CTSP support initially
5. Environmental concerns with equipment: dust, wind, glare, rain, moisture, outdoor elements in general. Special wooden boxes were constructed to remedy these issues. Recommend Toughbook or ruggedized computers for the Supply Unit.
6. A DeskJet printer was used. Recommend a laser printer due to durability, cost of ink cartridges, and greater network connectivity capability. Also recommend the printer be kept indoors.
7. Skill set: Front table knowledge of ICS, NFES, and incident terminology are necessary for success. Receiving and Distribution Managers will need to be familiar with I-Suite Supply Module.
8. Teams need to establish Standard Operating procedures such as who is issued supplies (Contractors, Strike Team Leaders, Crew Bosses, etc.), level of tracking (consumables, durable, trackable) and convey this information to front table personnel.

9. Exchanges: Limitations within I-Suite (need to work on Business Requirements)
10. Incident Replacement Items: Items that are left on the line and need to be replaced. Limitations within I-Suite (need to work on Business Requirements)
11. Items issued 'out the back door' not captured in I-Suite – Need to work on Business Process
12. Received Buying Team Orders not captured in I-Suite – Need to work on Business Process
13. General Message Form orders not captured in I-Suite – Need to work on Business Process
14. ROSS imports need to be done regularly to capture new resources on the incident so that they may be issued supplies.
15. In the future, IMTs will need to decide if Barcode cards are issued at Supply or Check-in and who will be issued a card (Strike Team Leader only, Crew Boss, etc.)
16. Engage Camp Crew early in I-Suite use. We did this with the second crew and the pilot worked much smoother. The crew caught on fast and was excited to be included in the pilot. They also discovered application bugs and helped troubleshoot.
17. Access to ICBS-R import files – Requires DMS Username/Password and internet access

Barcode Technology in the Communication Unit

An original requirement was to pilot in the Communication Unit. Since this was our first test, this was secondary to setting up the Supply Unit. As such, tasks were accomplished as time allowed during supply setup and validation.

Background

Radios are tracked using T-Cards and handwriting the following kit/radio information at the top of the T-Card: Either NFES 4381 Command / Tactical Radio or NFES 4244 Logistics Radio, the kit ID (e.g., K023), and the radio number (1-16). Example: 4381-K023-1
Radios come from the cache with a piece of tape on the front of the radio with the kit ID and radio number handwritten (e.g., K023-1).

Information currently captured on the T-Card when the radio is issued include: all three sections of the radio ID, last name, first name, assignment, case, request number, cell phone, and home unit. The data is periodically copied from the T-Cards to a spreadsheet and then tracked.

Tasks

1. Setup I-Suite network access to the Communication Unit where radios are being issued and returned.
2. Acquired a list from the Communication Unit of all radio kits with radio identification numbers and who they are issued to in order to create barcodes for each radio. Printed labels for all 11 radio kits.
3. Created a barcode and human readable text for each radio type, NFES 00424 and NFES 004381 and a barcode for the radio case NFES 005331. Cut these barcodes to the size of a credit card and had them laminated by the incident copy service.
4. Received each radio into I-Suite and scanned the barcode as the property number.

5. Most radios were already issued on T-Cards. Obtained approval to place the barcode labels on the top of the T-Cards. Did this for 3 radio kits to demonstrate the concept.
6. Added the current issue information for some of the radios into I-Suite.
7. With the incident starting to wind down, decision was made not to implement scanning in the Communication Unit. All handheld scanners were in use in supply so the equipment was setup using the desktop scanner for a demonstration.

Findings and Recommendations

1. **Finding:** Printing the radio ID barcodes requires the software, correct labels, and initially setting up the spreadsheet is time consuming.
   Recommendations: 1. Add the ability to print the radio ID barcodes from I-Suite; 2. Have the radio cache print a label with the radio ID as a barcode and human readable text and attach to the radio each time a radio kit is built.
2. **Finding:** Cell or a good contact phone number is not a specific data element in I-Suite and is not always captured during check-in. Additionally, the supply module does not list the cell phone as a data element on any screens or reports.
   Recommendation: Add a data element to check-in to capture cell phone. Add an option to add/edit a cell phone in the supply module and add cell phone to grids and reports as needed.
3. **Finding:** I-Suite appeared to run extremely slow while in the Communication Unit.
   Recommendation: Requires further testing to determine if this was due to the network or the computer.
4. **Finding:** Ability to flag a resource as having a trackable supply item issued to them in the Demob and Time module currently exists. Would like a separate identifier in Demob and Time for a resource that has a communications item (Radio, etc).
   Recommendation: Add an additional flag in the Demob and Time modules to identify when a communication item is still issued to a resource.
5. **Finding:** The Communication Unit issues and tracks cell phones and wireless data cards collecting the same information about a resource as when issuing a radio.
   Recommendation: Demonstrated how the current system can accommodate issuing and tracking of items not in the supply catalog.
6. **Finding:** Supply module currently does not limit the supply catalog to communication items only when logged into I-Suite with just the communications role and vice versa with the supply supervisor or clerk role.
   Recommendation: Limit items shown in the supply module based on the user's role or provide an option for the user to choose the type of items to view. (Supply, Communications, Both)
7. **Finding:** Incident cards (Barcode cards) were issued at this incident in the Supply Unit. Not all resources that had a radio checked out had an incident card.
   Recommendation: Issue the incident cards during check-in.
8. **Finding:** When leaving the communications unit, one of the people assigned asked if we were going to barcode the rest of the T-Cards. We responded no and they volunteered to finish installing the labels. They explained that they were easier to read and standardized.

Benefits

1. Eliminates duplication of data capture between check-in and communications. (i.e., last name, first name, assignment, request number, cell phone, and home unit when issuing a radio or other equipment.)
2. Eliminates redundant data entry between the T-Cards and tracking spreadsheet.
3. Data is available real time to the people managing and issuing the radios.
4. Data is stored in the I-Suite database and based on standard operating procedures and backed up on a regular basis.
5. The data will automatically become part of the historical data for the incident by virtue of being in the I-Suite database.
6. Eliminate the need to manage and pass along a spreadsheet file during team transfer.
7. Can quickly and easily issue/return radios using the barcode.
8. Will have the ability to print reports, save as a PDF file, or export the report data.

Barcode Pilot Wireless Hardware Evaluation

The Pilot Team ordered Jonathan Wilson, CIMMT2 Computer Technical Specialist (CTSP) to assist in setting up the network equipment. Follows is Jonathan's evaluation and recommendations for equipment.

During the Barcode Pilot located at La Brea Fire ICP, two wireless Access Point/Bridge manufactures were tested, Cisco AIR-BR1310G-A-K9 and EnGenius EOC-2610. Testing criteria included ease of deployment, range, security and reliability for an ICP environment. The Cisco AP/Bridge is lacking in mounting options and required a nearby Home Depot to fabricate suitable mounting. Powering the units requires extension cord power which limits the distance the AP/Bridge can be placed from a network switch. Configuring will be a challenge for CTSPs who are not well versed in wireless networking or Cisco products. The units also weigh approximately 3lbs, making it cumbersome to mount. Wireless range at 54Mbps was less than 900ft, and has no option for an external antenna, which I expected more from a unit that costs $800.00+. Security supports WPA /WPA2 personal and enterprise, which meets our security requirements. I found, the Cisco AIR-BR1310G-A-K9 very reliable, however, this unit is better suited for a permanent installation and do not recommend this for an ICP environment. (http://www.cisco.com/en/US/prod/collateral/wireless/ps5679/ps5861/product_data_sheet09186a00802252e1.html)

The EnGenius EOC-2610 is one of the easiest AP/Bridge units I've deployed. Weighing just over a ½ lb, it mounts easily with a 2" hose clamp to commonly used antenna mast found in the Comm Unit. Powering the unit is done by a PoE (power over ethernet) injector with a CAT5/6 length of up to 300ft, giving you flexibility on placement of the unit. Configuration couldn't be easier; lesser experienced CTSPs should have no problem setting this up. The range of this $85.00+ unit was more than 2 miles at 54Mbps and can be extended with use of an optional external high gain antenna, either directional or omni. WPA/WPA2 personal and enterprise security is also supported with this unit. All in all, the $85.00 EnGenius EOC-2610

out preformed the $800.00 Cisco unit and would recommend this for an ICP environment. (**http://www.engeniustech.com/resources/EOC-2610%20Datasheet%200409.pdf**)

Closeout

When it was known that the Type 1 IMT would transition with a Type 2 IMT, an insert was included in the August 21 IAP (See Attachment C). On August 23, all network/computer equipment installed for the pilot was taken down and re-boxed for transport to the San Dimas Technology & Development Center. An attempt was made to gather as many of the issued cards as possible for use on the next pilot incident. A self-addressed envelope was left to collect remaining cards. A closeout meeting was held with the Supply Unit Leader. Donna Tate and Gina Bald spoke with the Incident Commander to report on the assignment and to express appreciation for the support of the IMT. A Pilot Team closeout was held that same afternoon.

Morris Incident

SoCal Team 2 (Roy Woychak, Incident Commander) was mobilized to the Morris Incident on the Angeles National Forest on August 26, 2009. During our first test on the La Brea Incident, the Pilot Team had an opportunity to work closely with several members of this team. IMT members gained familiarity with the application and were very enthusiastic about the pilot. The Pilot Project goal was to test barcoding on at least two incidents. With growing concern that our 2 pilot IMTs would not be deployed, the Pilot Team agreed to consider testing with SoCal Team 2 if they were deployed during their current rotation.

Mobilization

On August 26, Dave Haston notified the Pilot Team of SoCal Team 2's deployment. Pilot Team members mobilized:

- Donna Tate (arrived on August 27 and departed August 28)
- Marcus Medina (arrived on August 27 and departed August 28)
- Mark Paskett (arrived on August 27 and departed August 28)

Supply Pilot Kits were delivered to the Incident by Dave Haston, IMT and Pilot team member. Key IMT members were notified that the I-Suite Supply Pilot Team would be deploying the Barcode Pilot.

Setup

Supply was located adjacent to ICP providing accessible power and connectivity to the I-Suite server. A DHCP wireless connection was already in place at the ordering trailer which was located in very close proximity of the Supply Unit.

- The Pilot Team ran a 100' cable from the ordering trailer to the Supply Unit network switch

- Network cables, laptops, scanners and printers were connected and operational within 2 hours of Pilot Team's arrival

Notable Successes

- IMT members Evan Tiss, Ordering Manager, and Dave Haston, Facilities Unit Leader Trainee, worked closely with the I-Suite Pilot Team on their previous deployment at the La Brea Incident. This previous experience aided in the rapid setup and deployment of the Barcode Pilot
- Briefing the Camp Crew and supply personnel upon arrival was instrumental in successful implementation
- With lessons learned from the La Brea, the decision was made to have the camp crew begin using the I-Suite Supply module as soon as it was operational. This provided them ownership in the process and they embraced the learning opportunity.

Limitations or Special Needs

See the La Brea Incident

Closeout

On August 28, 2009, the I-Suite Supply Pilot team was notified that one of the original Pilot IMTs, CIIMT1, was being assigned to the Big Meadow Fire in Yosemite National Park. After discussions with the I-Suite Supply Pilot Team and the 2 IMTs, the decision was made to pull out of Morris and deploy with CIIMT1.

The I-Suite Supply Pilot team briefed Morris incident personnel and proceeded to pack the kits and transport them in rental vehicles to the Big Meadow Fire.

Although the Supply Pilot Team only supported the incident for approximately 24 hours, the overall deployment and test were very successful. The equipment was set up and operational in less than 2 hours and the Camp Crew was trained and functioning with little direction. SoCal Team 2 was very supportive of the Pilot team's decision to mobilize with CIIMT1, but expressed disappointment that the automated process was being terminated. They had already observed the advantages that the automated process provides.

Big Meadow Incident

Pilot IMT CIIMT1 (McGowan) was mobilized to the Big Meadow Incident on August 28. The Pilot Team arrived on August 29.

Donna Tate – Reassigned from Morris Incident (arrived August 29, departed September 2)
Marcus Medina – Reassigned from Morris Incident (arrived August 29, departed August 31)
Mark Paskett – Reassigned from Morris Incident (arrived August 29, departed September 2)
Gina Bald (arrived August 29, departed September 8)
Hallie Toews (arrived September 1, departed September 8))

The Pilot Team was ready to start the afternoon of August 29. Information on the Pilot was included in the Incident Action Plan (IAP) for August 30 and posted on the information board outside the Eating Area (See Attachment B for example). The Camp Crew was briefed and trained. The application was turned completely over to them with supervision from Receiving and Distribution Managers and the Pilot Team. The Yosemite National Park Administrative Officer was given a demonstration of Supply Module.

Notable Successes

- The Lessons Learned from previous assignments aided in quickly setting up the equipment and implementing Supply Unit Business Processes for success.
- Briefed the Camp Crew and Receiving and Distribution Managers upon arrival which was instrumental in them taking ownership.
- Produced Waybills for items Released to National and Local Caches. Information was copied from handwritten waybills and the automated system caught mistakes in NFES numbers and descriptions. Automated Waybill sorted items in numerical NFES number order for easy searches.
- Contingency plan was activated when generator was shut down for maintenance. Manual process was continued and automated process picked up when generator was back in service.
- ICBS-R Packing Lists assisted in showing what items and quantities would be on the next Cache truck. This helped the Supply Unit anticipate and plan for the shipment.
- Property Reports were very helpful in quickly showing the number issued and the location of trackable items.
- The IMT situated the Supply Unit within line of sight of the I-Suite Server. The Cisco Air Bridges were successfully setup and used.

Limitations or Special Needs

See the La Brea Incident. The Communication Unit expressed interest in the Module. It was explained that it could definitely be used and conveyed our experience from the La Brea Communication Unit. The Pilot Team suggested that the User Community express their concerns to the National Radio Cache on the lack of barcodes on communication equipment.

Closeout

When the date was known that the Type 1 IMT would turn over the incident to the Local Unit, an insert was included in the September 7 IAP (See Attachment C for example).
On September 8, all network/computer equipment installed for the pilot was taken down and re-boxed for transport to the San Dimas Technology & Development Center. An attempt was made to gather as many of the issued cards as possible. A self-addressed envelope was left to collect remaining cards. A closeout meeting was held with Dan Turner, Logistics Section Chief. Gina Bald relayed the successes found during the assignment. Dan has tasked his Communication Unit Leader to contact the National Radio Cache to look at barcoding communication equipment. He expressed the team's appreciation for the Pilot Team's work and excitement for the future of bar codes at incidents. Gina asked him to please pass on thanks to the team for their support and enthusiasm for the pilot.

Conclusion

The Pilot team is very pleased with the findings and the work accomplished at the incidents. The IMTs are excited to see what happens next and are ready to take the next step to implement. We have been requested to present our findings, along with a hands-on demonstration, at the 2010 California IMTs Meeting.

Discussions will be held with Mary Ann Szymoniak, Business Lead, Tory Henderson, Branch Chief Equipment and Chemicals, and Jon Skeels, Senior Project Manager as to where we go next with equipment needs and application enhancements/fixes.

Attachment A NFES Smartbook Example

Item Id	Short Description	UOM	Bar Code
000021	BAG - garbage can liner, plastic, 30 GL, 39" x 33"	BX	
000022	BAG - sleeping, cloth, washable, 3 lb fill, 34"x76" (100" zipper)	EA	
001062	BAG - sleeping,firefighters,36" x 86" "BLUE"	EA	

Attachment B Flyer and IAP Insert

Bar Code Pilot

Pincha-Tulley's Team, CIIMT3, is participating in the NWCG Incident Based Automation (IBA) Bar Code Pilot.

When you check out Supply and/or Communication Unit items, you will be issued an Incident Card. This card contains a Bar Code that will be associated with your Name and Request Number. No Personal information is collected or contained on the card.

The card will be scanned at the Supply and Communication Units and all items that are issued will be associated with you in the I-Suite Incident Database. When items are returned, this will be reflected against your Name and Request Number. The Incident Card will be returned to the Supply Unit when your ICS- 221 Checkout Form is signed at the Supply and Communication Units. If you lose your card, please visit the Supply Unit for a new card. Your lost card will be 'removed' from your Name.

The IBA Project Team is working in the Supply Unit. Please feel free to visit us if you have any questions or comments. We want your feedback! Thank you for your participation in this pilot.

Attachment C Software Fixes during Pilot

Pilot team was mobilized with version Beta 5.

Beta 5 Fixes (La Brea Incident):

- Clear Location button added to Issue screen
- Fixed the problem of when one person has the issue screen open with items in the shopping cart. Another person opens the application and defaults to the issue screen. Items display in the shopping cart and cannot move off the screen or select another item without getting the message asking to save the items.
- Fixed the problem when on the issue screen, click on a resource that has items in the shopping cart on someone else's computer. Items do not show in the shopping cart until you click on another resource.
- When issuing to or with a location, the location does not clear. If the user doesn't notice this, the next issues will include the location. Fixed by clearing the location after saving the shopping cart.
- Fixed erroneous message box: Two people have the same resource selected, both on the issue screen. One person issues items into the shopping cart and before saving the other person opens the Issue Return screen then clicks back on the Issue screen and gets the message that You have items selected to issue but have not done so…Save all Items?" with a Yes or No option. Whichever option is selected will affect the other persons issue items. Fixed by no longer getting the message when opening the Issue screen. NOTE: Once in the issue screen, the screen is grayed out with the original resource selected and items are in the shopping cart. Moving to another resource or screen will prompt to save, yes or no.
- Problem not fixed: Two people have the same resource selected, both on the issue screen. One person issues items into the shopping cart and before saving the other person clicks another resource and gets the message asking to save yes or no but doesn't see the items in the shopping cart. This will be looked at this Winter.

Beta 6 Fixes (La Brea Incident):

- Fixed problem with the Issue returns increasing the RFI quantity by 2 when returning a trackable item.
- Fixed problem that cannot return a trackable item as NRFI, get an error message about cannot return a quantity greater than 1.
- Corrected receiving the same non-trackable item that is already in the cart not incrementing the quantity of the item already in the cart. It adds another row in the grid and when saved, adds a record for each row in the supply items table and should not. This then shows multiples in the issue catalog grid for the same item.
- Fixed errors on the receive screen when saving.

Beta 7 Fixes (La Brea Incident):

- Fixed problem with multi-select in the lower grid on the Issue Returns screen (no longer permit multi-select)

- Changed issue screen to only allow issuing to a resource OR a location, not both
- Fixed problem with storing apostrophes in the remarks fields on the on all popup screens in Supply module
- Fixed problem with auto complete in location dropdowns on Issue and Issued returns
- Fixed problem (app crash) when displaying issue report for a location
- Resized property number field on Imported Supply Items report
- Fixed problem displaying correct quantities on Issue Report
- Fixed an error occurring while navigating between Issue and Issue Returns screens (Note: different errors still remain, but seem to be inconsistent so far

Beta 8 Fixes (La Brea Incident):

- Set issue report screen to maximize on open
- Fixed problem with duplicate trackable items while using scanner to do Quick Receive
- Fixed problem with selecting Trackable item in grid and using the Issue Item method to issue to resource on the issue screen

Beta 9 Fixes (La Brea Incident):

- Corrected user message on Quick Release save. Message had been indicating that the system was issuing not releasing.
- Added Home Unit column to resource grids on Issue and Issue Return screens
- Rearranged column order in resource grids on Issue and Issue Return screens making incident card number column more visible
- Added system ability to select the current resource on the View History screen
- Fixed problem displaying items issued to a resource on the Issue Return screen
- Added ability to “minimize” the Issue Report display screen allowing other tasks to be performed
- Fixed save validation problem while editing a Supply Location
- Added checkbox to Issue Return screen to exclude consumable items in the items issued grid
- Fixed problem with displaying items in the items issue grid while using the arrow keys to navigate up and down the resources grid

Beta 10 Fixes (La Brea Incident):

- Added ability to issue incident card to resource by scanning unused incident card while a resource without an incident card is selected in grid on issue screen
- Added remarks box to Return Items screen in Issue returns

Beta 11 Fixes (La Brea Incident):

- Fixed problem with filter grids not clearing properly (problem created in beta 10)
- Added Property Status report

Beta 12 Fixes (La Brea Incident):

- Fixed problem with Property Status report

Beta 13 Fixes (Big Meadow Incident):

- Corrected problem with incorrect data getting displayed in the Property Number dropdown box on the Return by Property Number screen
- Resolved error that was occurring when issuing a trackable item from the Supply Items grid on the Supply Issue screen
- Corrected problem occurring when receiving a trackable item from an ICBS-R import that has already been manually received
- Modified Items Issued report to group by Item Category
- Corrected problems related to the Do not clear NFES Number checkbox on the Quick Issue screen
- Corrected problems with issue return. Some return methods stored a positive number others stored a negative number
- Corrected problem with the Return by Property Number method that was not removing the trackable item from the resource it was issued to
- Corrected problem with opening Items Issued report with no resource or location selected.

Beta 14 Fixes (Big Meadow Incident):

- Prevent user from importing ICBS-R data file that contains shipment information for an incident that is not in the database.
- Modified Supply Release to not select a row in the Locations grid when the screen is opened. Added message to inform user that a location must be selected to release a supply item.
- Corrected problems with data displayed in the Items Issued grid on the Supply Issue Return screen. Problem was occurring when the arrow keys were used to navigate up and down in the Resources grid.
- Corrected problems with the filter buttons on the Supply Issue and Issue Returns screens.
- Corrected problem occurring when a supply item was manually created using an NFES # used by the supply cache, then importing and receiving ICBS-R data that contained a cache item with the same NFES # used on the manually created item.
- Corrected problem when returning a trackable item that was causing the NRFI quantity for the item to be greater than 1.
- Added labels to the Supply Release screen, identifying it as such. Also added label to identify the currently selected location for release.

Beta 15 Fixes (Big Meadow Incident):

- Resolved errors occurring when attempting to release non-trackable supply items on the Supply Release screen
- Prevent the release of a trackable supply item that is still issued to a resource or location

Other item(s) to note:
Problems related to some errors occurring when opening the Supply Issue screen are currently not reproducible. It is unclear in which beta version the error conditions were corrected.

Attachment D End of Pilot IAP Insert

Bar Code Pilot

The NWCG Incident Based Automation (IBA) Bar Code Team is ending the pilot on Saturday, August 22. Please return your Incident Cards to the Supply Unit by Saturday, 2200 hours. We would like to thank you for your patience with and participation in this effort.

We plan on visiting one more incident this season to fine tune our findings. For more information on I-Suite, visit our web page at: http://isuite.nwcg.gov

We would appreciate your feedback. Please provide any comments below to help us improve the product. Return comments to the I-Suite Comments box located in the Supply Unit.

I-Suite Bar Code Pilot Comments