1 Mar, 2013

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**Progress Report – 1 Feb 2013 – 28 Feb 2013**

Contract Number: HSHQDC-06-D-00022

Contract Number 7500097279

Order Number: HSCG23-07-J-TED150

Task Order – Performance Work Statement (PWS) 1.12

Attachments: (1) SAROPS subcontractor financial reports

1. **SAROPS Systems Component Services Tasks**
   1. **Activities completed:**
      1. **Primarily, I worked on LOB. I had the basic formula in place but R21 used that formula verbatim only some of the time, and a small modification the rest of the time. I took ~20 R21 messages that included ELOB hits and R21 fixes and ran them through SAROPS. For speed and accuracy sake, I wrote code that reads an R21 file and populates a SAROPS case. I discovered the modification and made it in my code. There’s no guarantee that we’ll always match, but we do on all known cases. In addition, I wrote filters for bad sets of LOBs and put them in. In short, there was a lot of work based on observations. This was beyond the basic formula and I was happy to get feedback on this. Here are a few tweaks made without really modifying the basic formula which, for a standard “fix,” is unchanged.**
         1. **Jack wanted a few other filters and he did not want my old strategy of discarding the most errant bearing call and trying again with a smaller set. Once a test fails, the entire case reverts to the old processing. Updated Sim.properties to include the parameters for these tests. I probably changed Sim.properties at least 4 times. By the way, LOB processing can be turned off by using Sim.properties.**
         2. **Rob discovered a strange situation that can occur if there’s a large uncertainty for the receiver’s position and a very small bearing standard deviation. Fixed that. R21 cannot have that.**
         3. **Had to add 0 position error to bearing calls since R21 has perfect accuracy.**
         4. **Put together pictures for documenting the LOB processing. Some of these were based on R21 cases and some on Jack’s cases.**
         5. **Had to expand the LKP code to include direction and different size axes since LOB ellipses are essentially an elliptical LKP. Keeping 1414 code as stable as possible, I developed this in 15 code and then made a mistake (that Rob noticed) when copying it back to 1414 code. Fixed that.**
         6. **Numerous sessions explaining different results, such as why we drop to 1413 in certain cases, why some LOBs are apparently ignored, etc.**
      2. **Did some work on streamlining Sim output. Started working on Sim input.**
      3. **Reverse Drift had an ancient bug in the POS report. Fixed that (15 only) (worked with Edna).**
      4. **GetStatus is better now (15 only) (worked with Judy)**
   2. **Travel completed:**
      1. **None**
   3. **Upcoming activities scheduled:**
      1. **Update the documentation of the xml I/O of planner and simulator.**
   4. **Travel planned:**
      1. **None**
   5. **Concerns or recommendations:**
      1. **.**

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| --- | --- | --- | --- | --- |
| **Name** | **Activity Worked** | **Hours Worked** | **Hourly Cost** | **Total Cost** |
| Kratzke (New Contract) | Coding/Doc/Travel | 110 | 255.16 | 28067 |
| Stone | Doc | 0 | 223 | 0 |
| L White (Tech Writer) |  | 0 |  | 0 |
|  |  |  |  |  |
| **Totals** |  | 110 |  | 28067 |
|  |  |  |  |  |