## The Craftsman: 24 Dosage Tracking I OH NO!

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...Continued from last month. You can download last month's code from: www.objectmentor.com/resources/articles/CraftsmanCode/Craftsman\_23\_Raggedy.zip

## 20 Feb 2002,18:00

Whew! What an afternoon! I just got out of the strangest meeting I've ever been in. I had to write this down before dinner or else I'd forget the details. It started as Avery and I were on our way to the rim to play LandCraft in the game room. We had just gotten SMCRemote to do it's first remote compile, and we wanted to celebrate. We didn't get very far, though, because Jean pinged us just as we were leaving the lab.

"Hello my dears!" she said to both of us though our lapel coms. I hope it's not too much of a bother, but I wonder if you could join me up in the .36g lounge in alpha shaft. I've got something new for you two to work on, and...well...why don't you just come up here and I'll explain everything." Avery and I looked at each other, grimaced, shrugged, and headed for the alpha shaft turbo.

Jean must have pre-coded the doors, because they opened for us before we could knock. When we stepped in we saw Jasmine, Jerry, Jean, and two people I'd never met before. One was a tall middle-aged woman with striking red hair, and the other was a thin, bespectacled, and pleasantly smiling fellow just a few years older than I. Jasmine was standing and gathering her belongings. She appeared to be getting ready to leave.

Avery took one look at Jasmine, and his buggy eyes got even buggier. Apparently he'd never seen her before. It was good to see someone else's first reaction to her – it put things in perspective.

Jean beamed at us and said: "You boys made it down here in good time! I'm always so impressed by the vigor of young boys, aren't you Jasmine dear? Oh, but there I go gabbing away again and distracting everyone from the point. I just don't know why I do that."

She seemed to gather herself, and in that fraction of a second I could see a determination on her face that I'd somehow missed before.

"Alphonse, Avery, this is Carole and Jasper. Jasper is going to be working with you and Jerry on a new project. Carole is the sponsor for this new project. She'll be working very closely with you too, helping to define the requirements — oh, you call them stories nowadays don't you. Goodness, I'm sometimes so forgetful. You'll be starting on this project first thing in the morning. Carole, why don't you summarize dear."

"Excuse me, Jean." I blurted. "But what about our SMCRemote project? We just got the very first compile to run and we - er, I - was looking forward to getting back to it." I looked at Avery for support, but didn't get it. He still had his eyes locked on Jasmine.

"Don't you worry about that, Aphonse dear. Jasmine will be taking that project over from you. She'll be working with Adelade. SMC remote is a wonderful learning project for new apprentices, but you boys have bigger fish to fry right now."

"That's right Hot Shot" Jasmine's eyes nailed me – again. "Don't you worry about SMCRemote. I'm going to go gather up Adelade now, and she and I will pick up the pieces. Good work on getting that compile running." She looked around at everyone in the room, tossing her midnight hair with each buoyant turn of her head. "See you all later." She said, and then strode purposefully out of the lounge.

I could feel the atmosphere in the room change in her wake. Avery's gaze followed her until she was gone. An odd smile grew on Jean's face, and then vanished. She turned to Carole and said: Carole..."

Carole stood and gestured for us to sit down. Jerry and Jasper were already seated. There were two chairs next to them arranged so that all four of us were facing Carole. As soon as we were seated she began. From her very first utterance you could feel ambition and energy exuding from her.

"Avery and Alphonse, I'm glad to meet you." Her voice was loud, and her tone direct. "Jean has been telling me some very impressive things about you. Jasper and Jerry, it will be a pleasure to work with you again. Last time we had a lot of fun, didn't we?"

Jerry fidgeted uneasily, but they nodded congenially at each other, and I could feel a kind of anticipation building.

"So, let me tell you what's been going on."

Jerry and Jasper fixed their full attention on her. Avery and I glanced at each other and followed suite.

"Three days ago the Hazard Avoidance guys detected a fluctuation in the starlight along our vector. The stars directly in front of us appear to be dimming and reddening. Spectro-analysis shows significant  $H_2$  absorption lines in the dimmed stars. Apparently we are approaching a cloud of molecular hydrogen."

She let that sink in for a second. It didn't mean much to me, but Avery seemed to have recovered himself, and was very focused on her words.

"This dimmed patch of stars is growing perceptibly, meaning that it is close. The astronometry team says we're likely to enter this cloud in about two months."

Avery had his gaze fixed on Carole, and was holding his chin with his right hand. He moved that hand, pointing it at Carole and said:

"That shouldn't be a problem for us. Our Ice Shield will protect us from it. Molecular clouds aren't usually very dense after all."

Carole gave Avery an appraising glance and said: "That's true Avery. Those five cubic miles of ice running ahead of us will certainly deflect most of the H<sub>2</sub> particles away from the ship. Oh there will be some erosion, but astronometry doesn't think this cloud is deep or dense enough to make much of a dent in our shield. However, there does appear to be a risk of diffraction."

Avery nodded, trying to look knowledgeable, but it was clear that he was puzzled. Carole continued:

"From the point of view of the shield the cloud will appear to be a beam of neutral  $H_2$  molecules all moving directly towards us at nearly light speed. The shield is a disk, and the beam will be diffracted around the edges of the disk. Some of those diffracted  $H_2$  molecules will strike us. This won't cause a problem for the ship, or anyone on board. The skin of the ship is designed to absorb such particles. However, it does pose a slight risk for the folks doing maintenance outside."

"You mean radiation risk?" I said?

Jerry's head jerked in my direction, an unpleasant awareness beginning to dawn on his face.

"Precisely!" Carole beamed. Avery looked annoyed, perhaps jealous that I had pleased her. He said:

"So what do you need us for?"

Jerry's fists clenched.

"We need a new dosage tracking system." She said.

Jerry groaned. "Oh No, not again!"

Carole's smile nearly split her face in half. "Ah, I see you remember our last adventure with Dosage Tracking."

Jerry looked miserable. He hung his head and said: "I hoped I'd never see it again. Last time it was

the cleanup from a fuel spill, now it's diffracting molecular hydrogen. God, when will this application die?"

Jean walked over to Jerry and put her hand on his shoulder. "There, there, Jerry dear. We aren't going to make you work on that old abomination you wrote when *you* were an apprentice. This time you get a team, and the opportunity to do it *right*."

I wasn't sure what *right* meant, but by the sternly emphatic way she said it, it must mean something pretty significant. Jerry just sat there shaking his head breathing deeply. Carole looked almost triumphant. Jean looked kindly determined. The rest of us had no idea what was going on.

Carole continued. "First thing in the morning -0800 -- we'll meet in your lab up on 44. At that time we'll go over the stories for the system, and plan the first iterations. We'll also sketch out some of the acceptance tests we'll be using - We will write those acceptance tests this time, won't we Jerry?"

Jerry looked more miserable than ever. He nodded while staring at the floor, while Jean smiled benignly next to him.

The meeting broke up pretty quickly after that. Avery and I were the last to leave the lounge.

"Do you have any idea what a Dosage Tracking system is?" I asked Avery.

"Of course I do." Avery said with a tone of annoyed superiority.

"What is it?" I asked.

Avery looked at me with almost a sneer on his face. "Go look it up, Hot Shot." And he strode off without a glance back.

Clearly something is bugging him, but I can't figure out what it could be.

To be continued...