Colony Scout - Task #1877

Wireless on ARM

10/26/2011 04:43 PM - Priyanka Deo

Status:	Assigned	**Start date:**	10/26/2011
Priority:	Normal	**Due date:**	11/16/2011
Assignee:	Ben Wasserman	**% Done:**	10%
Category:	OS	**Estimated time:**	0.00 hour
Target version:			

Description

Control wireless broadcasts using ARM

History

#1 - 10/26/2011 05:50 PM - Ben Wasserman

- Due date set to 11/16/2011

- Assignee set to Ben Wasserman

#2 - 11/07/2011 06:05 PM - Ben Wasserman

- % Done changed from 0 to 10

All the wireless will be handled by the AVR, not the ARM. I'm planning on using the library David Schultz and I were writing 2 years ago during Formation Control. I think it should be this way because the Zigbee chip is built into the AVR, and also so we don't bog down the ARM interfacing with it.

We had written most of it, and were in the process of testing. It was fairly reliable, but had some issues that we were still hunting down when the semester ended.

The new library also incorporates TCP-like reliability functionality, but this had not been implemented yet, due to the unresolved bugs in the main functionality. David says that the current state is already more reliable than the current Colony 3 wireless library, but I'd like to try to work out the bugs before trying to implement them. Mostly, I'd like to ensure that the library won't crash or break itself. Once that is done, I'd say move on to reliability features.

Since the interaction of AVR and Zigbee is very similar between Scout and Colony 3, then we can probably do development on the Colony 3 bots before we port it over to Scout.