UNC Charlotte, Department of Electrical and Computer Engineering ECGR3/5/6090, Fall 2003, Homework #8, Due: 11/3/03, at the beginning of class (20 points)

- 1. Read the Jack Ganssle article "Bailing frantically." In four lines of correct English, summarize Mr. Ganssle's article. (4 points)
- 2. We have an interrupt-driven serial communication setup with 2 Renesas boards communicating through their UART0s. They are using one stop bit, no parity, eight data bits LSB first, and running at 7200 baud. We want the transmitter to generate an interrupt when the transmit buffer is empty. Similarly the receiver will generate an interrupt when the receive buffer is full. CTS on the transmitter and RTS on the receiver should be enabled. Assume we are using count source f₁.



- a) Show the values of ALL of the necessary control registers on the transmitter side. Show each control register once as an entire byte. (6 points)
- b) Show the values of ALL of the necessary control registers on the receiver side. Show each control register once as an entire byte. (6 points)
- c) What is the maximum interrupt frequency on the transmitter side? (3 points)
- d) How long did this homeowrk take you? (1 point)