Tested 9/19/23 MJB

```
SciDos>u4stalk 0 19200 0
U4STALK: Program Version 1.1
Version 8.7  UNRELEASED DEVELOPMENT NONAUTOMATED BUILD
Using uart port 0 at 19200 baud
Raising a total of 1 bit(s):
  0
-------------------------------------------------------------------------
  Opening port 0:SBMB:J0
  19200 baud, N81, line buf: 0, no input data timeout(secs): disabled
  in queue size: 204800, out queue size: 2048
sci_uart_drain_input(0):

sci_uart_drain_input:Drained 0 chars
bit_shared_open(): bit(0) is already open.
Bit(0) use count is now 2.
bit_shared_raise(): Raising bit(0).
All the setup is done. Beginning emulation....
To exit this program:
  Drop Carrier Detect for 3 seconds (i.e. unpower freewave)
  --or--Type Ctrl-C and hit NO keys for 1 secs.
-------------------------------------------------------------------------
99/99/99        99:99:99        695     75      700     4130    460     234     538
99/99/99        99:99:99        695     72      700     4130    460     234     538
99/99/99        99:99:99        695     74      700     4130    460     234     537

Ser FLBBCDSLC-8430
Ver TripletD 4.07
Ave 19
Pkt 0

99/99/99        99:99:99        695     76      700     4130    460     206     536
99/99/99        99:99:99        695     77      700     4130    460     206     535
99/99/99        99:99:99        695     69      700     4130    460     211     536
99/99/99        99:99:99        695     463     700     1315    460     1340    536
99/99/99        99:99:99        695     4130    700     4130    460     4130    535
99/99/99        99:99:99        695     4130    700     3001    460     4130    535
99/99/99        99:99:99        695     4130    700     3211    460     4130    535
99/99/99        99:99:99        695     4130    700     3816    460     4130    535
99/99/99        99:99:99        695     4130    700     4077    460     4130    535
99/99/99        99:99:99        695     2600    700     2713    460     2575    535
99/99/99        99:99:99        695     80      700     3323    460     126     535
99/99/99        99:99:99        695     117     700     4130    460     150     535
99/99/99        99:99:99        695     139     700     4130    460     153     535
99/99/99        99:99:99        695     143     700     4130    460     155     535
99/99/99        99:99:99        695     145     700     4130    460     154     535

Heard exit char, Leaving emulation_loop()
sci_uart_close(0): Closing SBMB:J0
Restoring bit[s] to initial state.
Lowering bit: 0
Bit(0) raise count is now 0.
bit_shared_close(): bit(0) is still in use.
Bit(0) use count is now 1.
return 0; from main()
-------------------------------------------------------------------------


SciDos>




GliderLAB I -3 >loadmission sci_on.mi

load_mission(): Opening Mission file: SCI_ON.MI
Setting SENSOR c_science_on(enum) value 3.000000
Setting SENSOR c_science_all_on(secs) value 0.000000
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  68  Setting SENSOR c_science_send_all(bool) value 1.000000
  69  Setting SENSOR u_use_ctd_depth_for_flying(bool) value 0.000000
  70
  71
  72  GliderLAB I -3 >231.06 63 Sent science:s:c_flbbcd_on(sec) 0-
  73  231.10     Sent science:s:c_science_send_all(bool) 1-
  74  231.14     Sent science:s:m_cycle_number(nodim) 63-
  75  231.56     science wrote:sci_flbbcd_bb_ref(nodim) 700
  76  231.58     Sent science:sensor_num:sci_flbbcd_bb_ref(nodim) 1228-
  77  231.65     science wrote:sci_flbbcd_bb_sig(nodim) 4130
  78  231.68     Sent science:sensor_num:sci_flbbcd_bb_sig(nodim) 1229-
  79  231.75     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
  80  231.78     Sent science:sensor_num:sci_flbbcd_bb_units(nodim) 1230-
  81  231.86     science wrote:sci_flbbcd_cdom_ref(nodim) 460
  82  231.89     Sent science:sensor_num:sci_flbbcd_cdom_ref(nodim) 1231-
  83  231.96     science wrote:sci_flbbcd_cdom_sig(nodim) 293
  84  231.99     Sent science:sensor_num:sci_flbbcd_cdom_sig(nodim) 1232-
  85  232.06     science wrote:sci_flbbcd_cdom_units(ppb) 22.6074
  86  232.09     Sent science:sensor_num:sci_flbbcd_cdom_units(ppb) 1233-
  87  232.31     science wrote:sci_flbbcd_chlor_ref(nodim) 695
  88  232.34     Sent science:sensor_num:sci_flbbcd_chlor_ref(nodim) 1234-
  89  232.41     science wrote:sci_flbbcd_chlor_sig(nodim) 67
  90  232.43     Sent science:sensor_num:sci_flbbcd_chlor_sig(nodim) 1235-
  91  232.50     science wrote:sci_flbbcd_chlor_units(ug/l) 0.3808
  92  232.53     Sent science:sensor_num:sci_flbbcd_chlor_units(ug/l) 1236-
  93  232.65     science wrote:sci_flbbcd_therm(nodim) 538
  94  232.68     Sent science:sensor_num:sci_flbbcd_therm(nodim) 1238-
  95  232.73     science wrote:sci_m_present_secs_into_mission(sec) 231.782440185547
  96  232.76     science wrote:sci_m_present_time(timestamp) 1695150933.78244
  97  233.91     science wrote:sci_flbbcd_bb_ref(nodim) 700
  98  233.93     science wrote:sci_flbbcd_bb_sig(nodim) 4130
  99  233.96     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
 100  233.99     science wrote:sci_flbbcd_cdom_ref(nodim) 460
 101  234.02     science wrote:sci_flbbcd_cdom_sig(nodim) 158
 102  234.04     science wrote:sci_flbbcd_cdom_units(ppb) 10.2009
 103  234.07     science wrote:sci_flbbcd_chlor_ref(nodim) 695
 104  234.10     science wrote:sci_flbbcd_chlor_sig(nodim) 149
 105  234.15     science wrote:sci_flbbcd_chlor_units(ug/l) 1.3566
 106  234.18     Sent science:sensor_num:sci_flbbcd_chlor_units(ug/l) 1236-
 107  234.25     science wrote:sci_flbbcd_therm(nodim) 537
 108  234.27     Sent science:sensor_num:sci_flbbcd_therm(nodim) 1238-
 109  235.00     science wrote:sci_flbbcd_bb_ref(nodim) 700
 110  235.03     science wrote:sci_flbbcd_bb_sig(nodim) 4130
 111  235.05     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
 112  235.08     science wrote:sci_flbbcd_cdom_ref(nodim) 460
 113  235.10     science wrote:sci_flbbcd_cdom_sig(nodim) 157
 114  235.13     science wrote:sci_flbbcd_cdom_units(ppb) 10.109
 115  235.16     science wrote:sci_flbbcd_chlor_ref(nodim) 695
 116  235.18     science wrote:sci_flbbcd_chlor_sig(nodim) 149
 117  235.61 64  science wrote:sci_flbbcd_chlor_units(ug/l) 1.3566
 118  235.64     science wrote:sci_flbbcd_therm(nodim) 536
 119  235.67     Sent science:s:m_cycle_number(nodim) 64-
 120  235.81     science wrote:sci_m_present_secs_into_mission(sec) 235.777862548828
 121  235.84     science wrote:sci_m_present_time(timestamp) 1695150937.77786
 122  236.19     science wrote:sci_flbbcd_bb_ref(nodim) 700
 123  236.21     science wrote:sci_flbbcd_bb_sig(nodim) 4130
 124  236.24     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
 125  236.26     science wrote:sci_flbbcd_cdom_ref(nodim) 460
 126  236.29     science wrote:sci_flbbcd_cdom_sig(nodim) 152
 127  236.32     science wrote:sci_flbbcd_cdom_units(ppb) 9.6495
 128  236.34     science wrote:sci_flbbcd_chlor_ref(nodim) 695
 129  236.37     science wrote:sci_flbbcd_chlor_sig(nodim) 142
 130  236.45     science wrote:sci_flbbcd_chlor_units(ug/l) 1.2733
 131  236.47     science wrote:sci_flbbcd_therm(nodim) 536
 132  237.25     science wrote:sci_flbbcd_bb_ref(nodim) 700
 133  237.27     science wrote:sci_flbbcd_bb_sig(nodim) 692
 134  237.30     science wrote:sci_flbbcd_bb_units(nodim) 0.002264646
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135   237.33     science wrote:sci_flbbcd_cdom_ref(nodim) 460
136   237.35     science wrote:sci_flbbcd_cdom_sig(nodim) 426
137   237.55     science wrote:sci_flbbcd_cdom_units(ppb) 34.8301
138   237.58     science wrote:sci_flbbcd_chlor_ref(nodim) 695
139   237.60     science wrote:sci_flbbcd_chlor_sig(nodim) 69
140   237.63     science wrote:sci_flbbcd_chlor_units(ug/l) 0.4046
141   237.65     science wrote:sci_flbbcd_therm(nodim) 536
142   238.39     science wrote:sci_flbbcd_bb_ref(nodim) 700
143   238.41     science wrote:sci_flbbcd_bb_sig(nodim) 4130
144   238.44     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
145   238.47     science wrote:sci_flbbcd_cdom_ref(nodim) 460
146   238.50     science wrote:sci_flbbcd_cdom_sig(nodim) 4130
147   238.52     science wrote:sci_flbbcd_cdom_units(ppb) 375.2277
148   238.54     science wrote:sci_flbbcd_chlor_ref(nodim) 695
149   238.57     science wrote:sci_flbbcd_chlor_sig(nodim) 3914
150   238.65     science wrote:sci_flbbcd_chlor_units(ug/l) 46.1601
151   238.68     science wrote:sci_flbbcd_therm(nodim) 536
152   239.63 65  science wrote:sci_flbbcd_bb_ref(nodim) 700
153   239.66     science wrote:sci_flbbcd_bb_sig(nodim) 4130
154   239.68     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
155   239.71     science wrote:sci_flbbcd_cdom_ref(nodim) 460
156   239.73     science wrote:sci_flbbcd_cdom_sig(nodim) 4130
157   239.76     science wrote:sci_flbbcd_cdom_units(ppb) 375.2277
158   239.79     science wrote:sci_flbbcd_chlor_ref(nodim) 695
159   239.81     science wrote:sci_flbbcd_chlor_sig(nodim) 4130
160   239.84     Sent science:s:m_cycle_number(nodim) 65-
161   239.98     science wrote:sci_flbbcd_chlor_units(ug/l) 48.7305
162   240.01     science wrote:sci_flbbcd_therm(nodim) 536
163   240.03     science wrote:sci_m_present_secs_into_mission(sec) 239.782104492188
164   240.06     science wrote:sci_m_present_time(timestamp) 1695150941.7821
165   240.65     science wrote:sci_flbbcd_bb_ref(nodim) 700
166   240.68     science wrote:sci_flbbcd_bb_sig(nodim) 4130
167   240.70     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
168   240.73     science wrote:sci_flbbcd_cdom_ref(nodim) 460
169   240.75     science wrote:sci_flbbcd_cdom_sig(nodim) 4130
170   240.78     science wrote:sci_flbbcd_cdom_units(ppb) 375.2277
171   240.81     science wrote:sci_flbbcd_chlor_ref(nodim) 695
172   240.83     science wrote:sci_flbbcd_chlor_sig(nodim) 4130
173   241.00     science wrote:sci_flbbcd_chlor_units(ug/l) 48.7305
174   241.03     science wrote:sci_flbbcd_therm(nodim) 536
175   241.82     science wrote:sci_flbbcd_bb_ref(nodim) 700
176   241.84     science wrote:sci_flbbcd_bb_sig(nodim) 4130
177   241.87     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
178   241.89     science wrote:sci_flbbcd_cdom_ref(nodim) 460
179   241.92     science wrote:sci_flbbcd_cdom_sig(nodim) 4130
180   241.95     science wrote:sci_flbbcd_cdom_units(ppb) 375.2277
181   241.98     science wrote:sci_flbbcd_chlor_ref(nodim) 695
182   242.00     science wrote:sci_flbbcd_chlor_sig(nodim) 4130
183   242.08     science wrote:sci_flbbcd_chlor_units(ug/l) 48.7305
184   242.10     science wrote:sci_flbbcd_therm(nodim) 536
185   243.01     science wrote:sci_flbbcd_bb_ref(nodim) 700
186   243.04     science wrote:sci_flbbcd_bb_sig(nodim) 4130
187   243.06     science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
188   243.10     science wrote:sci_flbbcd_cdom_ref(nodim) 460
189   243.12     science wrote:sci_flbbcd_cdom_sig(nodim) 4130
190   243.14     science wrote:sci_flbbcd_cdom_units(ppb) 375.2277
191   243.17     science wrote:sci_flbbcd_chlor_ref(nodim) 695
192   243.19     science wrote:sci_flbbcd_chlor_sig(nodim) 4130
193   243.24     science wrote:sci_flbbcd_chlor_units(ug/l) 48.7305
194   243.26     science wrote:sci_flbbcd_therm(nodim) 535
195   243.57 66  Sent science:s:m_cycle_number(nodim) 66-
196   243.88     science wrote:sci_m_present_secs_into_mission(sec) 243.776428222656
197   243.90     science wrote:sci_m_present_time(timestamp) 1695150945.77643
198   244.03     science wrote:sci_flbbcd_bb_ref(nodim) 700
199   244.06     science wrote:sci_flbbcd_bb_sig(nodim) 3540
200   244.08     science wrote:sci_flbbcd_bb_units(nodim) 0.012295302
201   244.11     science wrote:sci_flbbcd_cdom_ref(nodim) 460
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244.14    science wrote:sci_flbbcd_cdom_sig(nodim) 3565
244.16    science wrote:sci_flbbcd_cdom_units(ppb) 323.3042
244.19    science wrote:sci_flbbcd_chlor_ref(nodim) 695
244.27    science wrote:sci_flbbcd_chlor_sig(nodim) 3530
244.29    science wrote:sci_flbbcd_chlor_units(ug/l) 41.5905
244.31    science wrote:sci_flbbcd_therm(nodim) 535
245.17    science wrote:sci_flbbcd_bb_ref(nodim) 700
245.20    science wrote:sci_flbbcd_bb_sig(nodim) 325
245.22    science wrote:sci_flbbcd_bb_units(nodim) 0.000972072
245.25    science wrote:sci_flbbcd_cdom_ref(nodim) 460
245.28    science wrote:sci_flbbcd_cdom_sig(nodim) 43
245.30    science wrote:sci_flbbcd_cdom_units(ppb) -0.3676
245.33    science wrote:sci_flbbcd_chlor_ref(nodim) 695
245.35    science wrote:sci_flbbcd_chlor_sig(nodim) 53
245.43    science wrote:sci_flbbcd_chlor_units(ug/l) 0.2142
245.45    science wrote:sci_flbbcd_therm(nodim) 535
246.28    science wrote:sci_flbbcd_bb_ref(nodim) 700
246.30    science wrote:sci_flbbcd_bb_sig(nodim) 337
246.56    science wrote:sci_flbbcd_bb_units(nodim) 0.001014336
246.58    science wrote:sci_flbbcd_cdom_ref(nodim) 460
246.60    science wrote:sci_flbbcd_cdom_sig(nodim) 50
246.63    science wrote:sci_flbbcd_cdom_units(ppb) 0.2757
246.66    science wrote:sci_flbbcd_chlor_ref(nodim) 695
246.68    science wrote:sci_flbbcd_chlor_sig(nodim) 59
246.70    science wrote:sci_flbbcd_chlor_units(ug/l) 0.2856
246.73    science wrote:sci_flbbcd_therm(nodim) 535
247.45    science wrote:sci_flbbcd_bb_ref(nodim) 700
247.47    science wrote:sci_flbbcd_bb_sig(nodim) 612
247.50    science wrote:sci_flbbcd_bb_units(nodim) 0.001982886
247.52    science wrote:sci_flbbcd_cdom_ref(nodim) 460
247.56    science wrote:sci_flbbcd_cdom_sig(nodim) 70
247.58    science wrote:sci_flbbcd_cdom_units(ppb) 2.1137
247.60    science wrote:sci_flbbcd_chlor_ref(nodim) 695
247.63    science wrote:sci_flbbcd_chlor_sig(nodim) 44
247.96 67 science wrote:sci_flbbcd_chlor_units(ug/l) 0.1071
247.99    science wrote:sci_flbbcd_therm(nodim) 535
248.01    science wrote:sci_m_present_secs_into_mission(sec) 247.776733398438
248.04    science wrote:sci_m_present_time(timestamp) 1695150949.77673
248.07    Sent science:s:m_cycle_number(nodim) 67-
248.62    science wrote:sci_flbbcd_bb_ref(nodim) 700
248.65    science wrote:sci_flbbcd_bb_sig(nodim) 4130
248.68    science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
248.71    science wrote:sci_flbbcd_cdom_ref(nodim) 460
248.73    science wrote:sci_flbbcd_cdom_sig(nodim) 393
248.76    science wrote:sci_flbbcd_cdom_units(ppb) 31.7974
248.78    science wrote:sci_flbbcd_chlor_ref(nodim) 695
248.80    science wrote:sci_flbbcd_chlor_sig(nodim) 194
248.88    science wrote:sci_flbbcd_chlor_units(ug/l) 1.8921
248.91    science wrote:sci_flbbcd_therm(nodim) 535
249.70    science wrote:sci_flbbcd_bb_ref(nodim) 700
249.72    science wrote:sci_flbbcd_bb_sig(nodim) 4130
249.75    science wrote:sci_flbbcd_bb_units(nodim) 0.014373282
249.78    science wrote:sci_flbbcd_cdom_ref(nodim) 460
249.80    science wrote:sci_flbbcd_cdom_sig(nodim) 457
249.83    science wrote:sci_flbbcd_cdom_units(ppb) 37.679
249.86    science wrote:sci_flbbcd_chlor_ref(nodim) 695
249.88    science wrote:sci_flbbcd_chlor_sig(nodim) 228
250.05    science wrote:sci_flbbcd_chlor_units(ug/l) 2.2967
250.08    science wrote:sci_flbbcd_therm(nodim) 535
loadmission sci_off.mi

load_mission(): Opening Mission file: SCI_OFF.MI
Setting SENSOR c_science_on(enum) value 1.000000
Setting SENSOR c_science_all_on(secs) value -1.000000
Setting SENSOR c_science_send_all(bool) value 0.000000
Setting SENSOR u_use_ctd_depth_for_flying(bool) value 0.000000
```