

ALFA BIRD:

1. CROSSTALK HAS BEEN REPORTED ON ONE PASS (173) AND NOT VERIFIED SINCE. THE CROSSTALK WAS BETWEEN BN (815-1080) AND CN (165-202) AND ALSO FROM BW (59 [REDACTED]) TO CN. THE SPURIOUS PULSE (CN) OCCURRED AT THE TRAILING EDGE OF THE BN OR THE BW. THIS TYPE OF CROSSTALK HAS BEEN OBSERVED IN THE LAB ALTHOUGH NOT ON THIS BALL.
2. IN VIEW OF THE FACT THAT THIS BALL HAS NEVER EXPERIENCED RFI IN THE LAB AND NOT SINCE PASS 173 IN ORBIT, IT IS MY FEELING THAT NO RESTRICTIONS SHOULD BE PLACED ON ITS TASKING.
3. IN THE EVENT THAT SELECTED TASKING IS DESIRED, THE ONLY REQUIREMENTS ARE AS FOLLOWS:
 - A. IN THE PRIMARY MODE CN SHOULD BE TASKED ALONE OR WITH CW. IT SHOULD NOT BE TASKED WITH EITHER BN OR BW.
 - B. IN THE ALTERNATE MODE NO RESTRICTIONS ARE NECESSARY.
4. SIGNAL STRENGTH HAS BEEN CONSISTENTLY STRONG.

SUMMARY

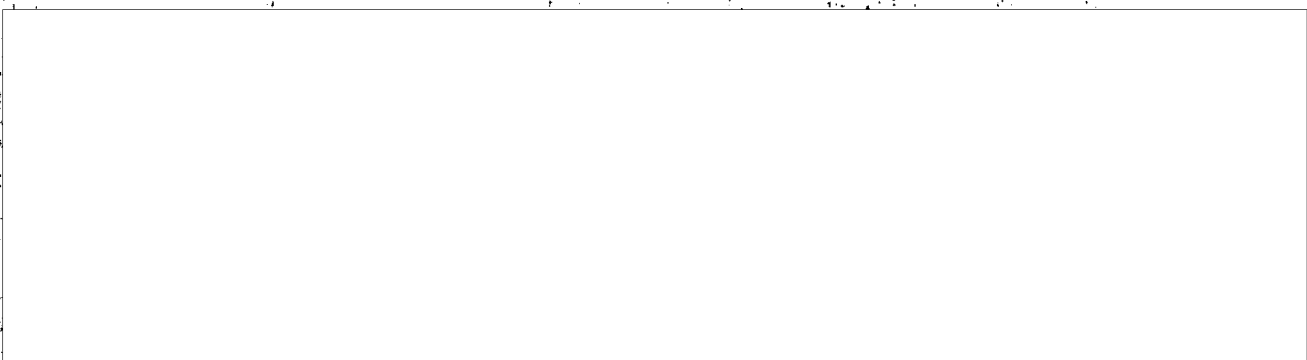
BRAVO BIRD

1. CROSSTALK HAS BEEN OBSERVED IN TWO BANDS IN THIS BALL. THE MOST OBVIOUS PROBLEM EXISTS WITH THE CN (165-202) BAND. THE EVIDENCE INDICATES THE PRESENCE OF CROSSTALK BETWEEN BN (815-1085) AND CN (165-202). IT IS INTERESTING TO NOTE THAT THE CROSSTALK OCCURS IN COINCIDENCE WITH WHAT LOOKS LIKE A DECREASE IN TRANSMITTED POWER LEVEL. I HAVE NO EXPLANATION FOR THIS AT THE PRESENT TIME AND I FEEL IT REQUIRES FURTHER INVESTIGATION. INSTANCES HAVE BEEN NOTED WHEN THE OFFENDING PULSE (CN) HAS OCCURRED WITHOUT IT'S COMPLIMENT ON THE BM CHAN. ALSO, THE CN PULSE TRAIN IN PORTIONS OF PASS 293 WAS OBSERVED TO BE SLIGHTLY OUT OF SYNC. WITH THE BN PULSE TRAIN. THIS LEADS ONE TO BELIEVE THAT THE PROBLEM IS NOT REALLY ONE OF CROSSTALK. IT MUST ALSO BE NOTED THAT THIS BALL SPENT 13 WEEKS IN RFI TESTING IN THE LAB WITH AN "ALL OUT" EFFORT TO ELIMINATE CROSSTALK FROM BN TO CN AND ALSO FROM BW (1820-2370) TO CW (440-555). THIS EFFORT SEEMED SUCCESSFUL AT FIRST BUT IS NOW QUESTIONABLE. A SECOND OBSERVATION OF CROSSTALK OF A DIFFERENT NATURE WAS OBSERVED IN PASS 279. IN THIS CASE CROSSTALK WAS OBSERVED BETWEEN BW (1820-2370) AND CW (440-555), AGAIN IN CONJUNCTION WITH AN APARENT CHANGE IN XMTR PWR LEVEL. NO OPPERTUNITY HAS BEEN AVAILABLE AS YET TO FURTHER INVESTIGATE THIS PROBLEM. IF TROUBLE WAS TO BE PRESENT, THE CN AND CW BANDS ARE THE ONES TO BE SUSPECTED.

- ~~TOP SECRET~~
2. IN VIEW OF THE CROSSTALK IN BOTH CN AND CW SEEMS TO BE ASSOCIATED WITH THE APPARENT CHANGE IN TRANSMITTED POWER LEVEL, IT IS MY FEELING THAT SELECTED TASKING BE USED UNTIL THE XMTR PROBLEM IS RESOLVED. I FEEL THAT EXTENSIVE TESTING IN THE THERMAL VACUUM CHAMBER AT NRL SHOULD BE ABLE TO SIMULATE THE PROBLEM IF ONE EXISTS.

IN THE PRIMARY MODE, ON AND OFF MAY BE
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 NEITHER COULD BE TASKED
 IN THE ALTERNATE MODE, NO RESTRICTIONS ARE
 NECESSARY.

4.
 5.



SUMMARY

CHARLIE BIRD

1. EVIDENCE OF CROSSTALK HAS ESSENTIALLY BEEN NONEXISTENT IN THIS BIRD. IT HAS TWO BANDS WHERE CROSSTALK IS POSSIBLE. (PRIMARY CN (155-184) AND ALTERNATE CW (345-555)). AS THE RECEIVED SIGNAL FROM THIS BASS HAS IN GENERAL BEEN POOR, IT IS HARD TO TELL IF CROSS TALK IS PRESENT. HOWEVER, IT IS TO BE NOTED THAT NO INDICATIONS OF CROSS TALK HAVE BEEN REPORTED FROM OTHER STATIONS WHERE STRONG SIGNALS HAVE BEEN RECEIVED.
2. THE PROBLEM OF LOW SIGNAL STRENGTH HAS BEEN RESOLVED TO ONE OF THE GROUND STATION AND NOT THE BALL. THIS IS PRIMARILY DUE TO CROSS POLARIZATION OF OUR RECEIVING ANTENNAS. THERE HAS BEEN SEVERAL INDICATIONS OF A CHANGE IN TRANSMITTER POWER, SIMILAR TO THAT OBSERVED IN BRAVO. THE LAST INDICATION OF THIS WAS PASS 187. AS FOR THIS PROBLEM, I FEEL IT IS SIMILAR TO THAT OF BRAVO AND CAN BE SOLVED.
3. I DO NOT FEEL AT THIS TIME THAT SELECTIVE TASKING IS NECESSARY FOR THIS BALL.

SUMMARY

DELTA BIRD

1. NO CROSS TALK PROBLEMS ARE EVIDENT AT THIS TIME. THERE IS ONLY ONE BAND THAT MIGHT BE SUSPECTED. BN (155-184). AS WITH CHARLIE BIRD, THE RECEIVED SIGNAL FROM DELTA HAS BEEN GENERALLY POOR AND THE POSSIBILITY OF CROSS TALK STILL EXIST. AGAIN, IT IS TO BE NOTED THAT NO EVIDENCE OF CROSS TALK HAS BEEN REPORTED FROM OTHER STATIONS WHERE SIGNAL STRENGTH HAS BEEN GOOD.
2. THE SAME COMMENTS APPLY TO DELTA AS CHARLIE CONCERNING SIGNAL STRENGTH - CROSS POLARIZATION, ETC.
3. NO CHANGE IN POWER LEVEL FROM EITHER TRANSMITTER HAS BEEN OBSERVED FROM DELTA AND STRONG SIGNALS HAVE BEEN HEARD OCCASIONALLY. [REDACTED]
4. NO SELECTIVE TASKING IS REQUIRED FROM [REDACTED] AT THIS TIME.

~~TOP SECRET~~
 OCCASIONALLY: [REDACTED]

HANDLE VIA
 BYEMAN TALENT KEYBALL AT THIS
 CONTROL [REDACTED]