DESIGN ASSURANCE ENGINEERING

TEST REPORT

ENGINEERING RELEASED
Several samples of the subject controller manufactured by WICO were given limited testing per the Environmental Engineering Manual, C061616, Revision B.

The test procedures utilized were: 1) Operating life; 2) temperature/humidity soak; and 3) electrostatic discharge susceptibility.

TEST RESULTS

1. The player velocity buttons were actuated mechanically for more than 2.2 million operations. The number of electrical contact closures agreed exactly with the number of mechanical actuations during the test. Game play was tested after the first million operations and was normal.

2. No functional discrepancies were noted in game play after 96-hour soak at 40°C and 90% relative humidity.

3. As initially received, the controller units were susceptible to electrostatic discharges which produced component failures in 2100 game units at 20KV. The standard levels are no data loss below 15KV and no component failures below 25KV.

   Examination of the internal construction showed that metal contact terminals and wire runs were very close to the box seam. By bending the metal contact tabs more vertically, and by moving the wires away from the seam, electrostatic discharge susceptibility was improved. Data losses did occur at 25KV (acceptable), but components were not affected.

CONCLUSIONS

The controllers as modified meet Atari minimum design standards and are acceptable. Mr. Syng Kim of WICO agreed to perform the manufacturing adjustments suggested to improve ESD withstand tests. Our Mr. Dzambik telephoned instructions on May 25, 1984, and again on May 29, 1984.
May 17, 1984

Mr. Joel Oberman
Group Product Manager
Entertainment Software
Atari Products
1399 Moffett Park Drive
Sunnyvale, CA 94088

Dear Joel:

We are shipping 50 production samples of the Atari Track & Field controller box for your approval with this letter. In order to expedite your order, we must have your approval in writing no later than May 21, 1984 in order to meet your delivery schedule.

Accompanying your written approval, we will also require the balance of the tooling cost amounting to $12,500.00.

If there are any changes to be made to this product, we must be notified immediately so that our lead times and pricing can be adjusted accordingly.

If I can be of any assistance to you, please don't hesitate to contact me.

Sincerely yours,

Lawrence Kesselman
Director of Manufacturing/Sales

cc:  Mr. Phillip Restaino
     Senior Vice President
     Atari Products

cc:  Mr. Kenneth Ashton
     Vice President Product Engineering
     Atari Products

cc:  Mr. Bryan Kerr
     Group Product Manager
     Atari Products

cc:  Ms. Cindy O'Leary - Atari Products
     Mr. Gordon D. Goranson - WICO Corp.