# Inter Office Memo



Coin Operated Games Division

| To:<br>From: | Distribution    |                            |                            |
|--------------|-----------------|----------------------------|----------------------------|
|              | Rick Moncrief   | RGUI                       |                            |
| Subject:     | Amplifone Meeti | ng Minutes - Feb. 21, 1984 | Date: <b>Feb. 27, 1984</b> |

Attendees: F. Becker, D. Hawes, S. Mangat, A. Nusbaum, D. Rekart, K. Renda, G. Victorine, D. Westerman, W. Woodworth

Next meeting: Tuesday, February 28, 1984 at 9 a.m. in the upstairs conference room of building 1501.

# Switching Power Supply

-Woody Woodworth will add the following to rework instructions:

Heatsink support tabs should be flush on the board, if they are not the board should be reworked!

-The first FIRE FOX sitdown games will use the switcher. Scheduled date is Tuesday, Feb. 29. Mon Man 5

### Video Disk Player Analog Board

- -In testing the video board, Singh Mangat found that the correct field pulse of 250 usec could be obtained and seemed consistent if the 470K resistors were used in conjunction with the Fairchild IC. Singh feels this would reduce the amount of rework if the resistors were changed rather than ICs.
- -Hum bars have been seen in the field when the video board is used with the linear power supply. To eliminate the hum bars, the following changes are necessary:
  - Add a heatsink and two resistors;
  - Affix regulators to the board.

The deviation and instructions for the above changes will be supplied to Frank Becker by Singh Mangat.

-Philips have decided the burst signal needs to be higher. Tom Patten and Ken Renda will discuss what affect this will have on the video board.

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# Color Raster Display

- -Two displays are now exhibiting an OVP problem. A fix is being sought presently. Probably later today a recommendation will be made to add a capacitor "as needed".
- -Frank Becker reported that four failures occurred, three in TX-1, at the ASI Show last weekend. These failures included:
  - 1. TDA chip went which resulted in intermittent vertical roll;
  - 3. CRT with blue arcing due to shipping damage;
  - 4. OVP reset once or twice but eventually went out for good.
- -Frank also mentioned he saw some horizontal width coils with slugs falling out. This condition may be present in the first 500 units. If slugs fall out in the future, however, they may be thrown away.
- -Field reports indicate an overall failure rate of 14%. Besides experiencing problems with the TDA 1170 chips, neck boards and connectors have fallen off during shipping. One distributor in Florida says that out of the 20 FIRE FOX games he received, 5 had display problems. Engineering will contact this distributor.

After last Wednesday, Feb. 15, Q.A. inspectors began checking to insure neck boards are fully seated.

-Electrohome will try to widen the brightness range of their display.

## XY Color Display

- -Some additions to the Wells Gardner displays in TEMPEST are being recommended when the game is converted to MAJOR HAVOC. These additions include a fan, pin cushion, zenor diodes, and clamp diodes.
- -Dennis Hawes will write a bulletin to the field asking them to verify Wells Gardner monitors in the field have the proper IPC, input clamps, output clamps, proper high voltage and the LK modification. Frank Becker will discuss this with Morgan Hoff.

### FCC

- -We have been cited for having uncertified POLE POSITION II and STAR WARS in the field although we need only verify our games. The reason we were cited was because there were no labels on these games. We should make sure all games, including converted games, have FCC labels.
- -Dennis Hawes will check whether or not a label is sent out with conversion kits.

- Test Hi V with all new moderafter 2-28-87