

TELECOPY

MATTEL INCORPORATED
ELECTRONICS DIVISION
5150 ROSELANDS AVE.
HAWTHORNE, CALIF. 90250

SYLVANIA

Electronic Products
Dept. 5471244

ATTN: HOWARD L. COHEN,
PURCHASING MGR.

FEBRUARY 5, 1979

AS REVIEWED BY TELECOM WITH DAVE CHANDLER ON 2-2-79, THE FOLLOWING IS A LIST OF THE MOST URGENT PROBLEMS THAT NEED RESOLUTION IN ORDER TO BUILD 50 COMPLETE UNITS IN EARLY FEBRUARY AND AN ADDITIONAL 250 UNITS BY THE END OF FEBRUARY.

1. NEED MATTEL APPROVAL ON GTE SYLVANIA POWER SUPPLY BOARD DESIGN.
2. NEED ARTWORK FOR LOGIC BOARD FROM G.I.
3. AWAITING 250 PIECES EACH OF THE TOP AND BOTTOM R.F. SHIELD AS WELL AS DRAWINGS TO BE USED TO SOURCE AND PROCURE ADDITIONAL PARTS. *design*
4. RE INLAY PLAIN, INLAY CONTROL AND INLAY DISC, WE NEED TO KNOW A) COLOR, AND B) DO THESE PARTS REQUIRE INDIVIDUAL UL AND/OR CSA APPROVAL, C) NEED PRINTS OF GRAPHICS. *mark*
5. NEED PRINTS AND SPECS ON SERIAL NUMBER LABEL AND FCC APPROVAL LABEL.
6. DENNY BOGART HAS ARRANGED FOR 500 SETS OF PLASTIC PARTS TO BE MADE BEFORE TOOLS ARE MOVED, AND FOR THE SCHEDULE FOR THE MOVEMENT OF THE TOOLS. WE ARE STILL AWAITING PRINTS WHICH MATCH THE SAMPLES INCLUDING SPECIFICATION OF COLOR.
7. EARLIEST MONITOR DELIVERY IS STILL 3/9.
8. DELIVERY ON THE 5 SPECIFIED SCREWS IS SPREAD BETWEEN 2/24 AND 3/7. WE ARE EXPEDITING SUBSTITUTES.
9. TRANSFORMER DELIVERY IS 3/1 AND THESE INITIAL UNITS ARE NOT UL APPROVED.
10. THE 1/19 PARTS LIST AS AMENDED BY PERRY'S WIRE OF 1/29 OBSOLETES THE FAIR-RITE CO. FERRITE BEAD AND REPLACES IT WITH A STACKPOLE FERRITE BEAD. WE ARE EXPEDITING STACKPOLE.

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11. CHROMIUMS CIRCUIT ASSEMBLY (2/1) NEEDS MATTEL APPROVAL.
12. 9-PIN CONNECTOR AT 3/1/79 IS BEING EXPEDITED.
13. REQUEST 500 FAN IMPELLERS AND SCHEDULE FOR RELOCATING TOOLING.
DAVE ADVISED THAT EXISTING TOOL WILL NOT SUPPORT PRODUCTION
QUANTITIES AND THAT WE SHOULD ACQUIRE PRODUCTION TOOLING.
14. PRINTS FOR THE FAN BRACKET AND GROMMET ARE OUT FOR QUOTES. DELIVERY
TO BE DETERMINED.
15. NEED ARTWORK FOR MASTER CARTON AND ARTWORK FOR LABEL FOR INDIVIDUAL
CARTON IN ORDER TO SOURCE.
16. NEED SPECIFICATIONS FOR PAINT IN ORDER TO SOURCE.
17. NEED INFORMATION CONCERNING INSTRUCTION SHEET, WILL IT BE PROVIDED
COMPLETE OR MUST WE SOURCE FROM A PRINTER
18. WE RECENTLY RECEIVED THE UPDATED DRAWING FOR THE ENDCAPS AND THESE
PRINTS ARE OUT FOR SOURCING.

WITH REGARD TO LONG LEAD ITEMS FOR THE SUPPORT OF PRODUCTION TO 60,000
UNITS, OUR PART BY PART ANALYSIS INDICATES THAT WE NEED APPROVAL TO
COMMIT AS FOLLOWS:

A. THE 11,000 UNIT INCREMENT (TO 16,000 UNITS).

1. FAN MOTORS - 2609-0640
2. COMPRESSION SPRING - 0405-4270.
3. SPRING FOR RESET BUTTON - 2609-4269

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- A. 4. CONNECTOR - 2609-9469
5. TRANSFORMER - 2609-9549
6. CABLE, 9 WIRE COILED - 2609-9569
7. CAPACITOR 10K uF - 67-260947
8. 255 X 8 RAM 3539 - 74-260911
9. 7407 IC - 74-260912
10. 74LS27 IC - 74-260913
11. 74LS125 IC - 74-260914
12. 74LS00 IC - 74-260941
13. IN4001 DIODE - 80-260955
14. IC SOCKET 40 PIN 89-260919
15. IC SOCKET 18 PIN 89-260920
16. IC SOCKET 28 PIN 89-260922
17. WIRE, 22 AWG. 98-260927
18. WIRE, 25 AWG. 98-260946/63
- B. THE 45,000 UNIT INCREMENT (TO 60,000 UNITS)
1. CAPACITOR 10K uF 67-260947
2. 74LS27 IC 74-260913
3. 74LS125 IC 74-260914
4. 74LS00 IC 74-260941
5. WIRE 25 AWG. 98-260946/63

MATTEL ELECTRONICS

February 7, 1979

John Robertson
GTE Sylvania
P.O. Box 360
Muncy, Pa. 17756

John,

I have discussed with Sylvania people several times the requirements for the FCC and Serial No. labels for the Mattel Intellelevision Game system. We've agreed that the Serial No. and Type Approval No. can be on the same label. However, the FCC Approval No. must appear only one place - the bottom of the Video Game unit.

It has also been verbally agreed that Sylvania will design a multiple section type of label which will contain the FCC Approval label and two or more Serial No. sections.

I have consulted with Mattel Marketing and have agreement with them that a simple white paper label with black printing fulfills our needs for the FCC portion of the label.

The size of the FCC label portion should be approximately 2" x 3" and have a permanent type adhesive that will comply with California Business and Professions Code, section 224.11 and FCC rules, section 2.925 (see attachments).

The following information needs to be printed on the FCC Approval label:

MATTEL ELECTRONICS
5150 ROSECRANS AVE.
HAWTHORNE, CALIFORNIA 90250

Model No. 2609
Serial No. _____
FCC Type Approval No. _____

VALID ONLY WHEN OPERATED
PURSUANT TO FCC RULES PART 15
MANUFACTURED IN U.S.A.

A photograph of the Mattel Electronic logo is attached. A drawing detailing the FCC label must be submitted with our application for approval. Therefore, we must act quickly to resolve the label design.

Sincerely,

C. Perry
C. Perry

cc: Dave Chandler ✓
Denny Bogart
Howard Cohen



§ 2.911 Fees.

No application for an equipment authorization will be accepted for processing unless it is accompanied by the fees prescribed in the Commission's schedule of fees in Subpart G of Part 1 of this chapter.

§ 2.912 Fees for type approval.

(a) An application for type approval must be accompanied by the filing fee prescribed in § 1.1120 of this chapter.

(b) Each grant of type approval is expressly conditioned (§ 1.1102(d)) upon payment of the requisite grant fee prescribed in § 1.1120 of this chapter. Failure to remit the specified grant fee within the time prescribed will result in rescission of the type approval which will then become null and void.

§ 2.913 Fees for type acceptance or certification.

(a) An application for type acceptance or for certification must be accompanied by the combined filing and grant fees prescribed in § 1.1120 of this chapter.

(b) If the application is withdrawn, denied or dismissed and no grant is issued, the grant fee that had been paid will be refunded pursuant to § 1.1103(c).

§ 2.915 Grant of application.

(a) The Commission will grant an application for type approval, type acceptance, or certification if it finds from an examination of the application and supporting data, or other matter which it may officially notice, that:

(1) The equipment is capable of complying with pertinent technical standards of the rule part(s) under which it is to be operated; and,

(2) A grant of the application would serve the public interest, convenience and necessity.

(b) Grants will be made in writing showing the effective date of the grant and any special condition(s) attaching to the grant.

(c) Neither type approval, type acceptance nor certification shall attach to any equipment, nor shall any equipment authorization be deemed effective, until the application has been granted.

§ 2.917 Dismissal of application.

(a) An application which is not in accordance with the provisions of this Subpart may be dismissed.

(b) Any application, upon written request signed by the applicant or his attorney, may be dismissed prior to a determination granting or denying the authorization requested.

(c) If an applicant is requested by the Commission to file additional documents or information and fails to submit the requested material within 60 days, the application may be dismissed.

(d) An application for type approval which has been accepted by the Commission in which the equipment required to be tested is not received by the Commission's Laboratory within six months following the date of the application, may be dismissed.

§ 2.919 Denial of application.

If the Commission is unable to make the findings specified in § 2.915(a), it will deny the application. Notification to the applicant will include a statement of the reasons for the denial.

§ 2.921 Hearing on application.

Whenever it is determined that an application for equipment authorization presents substantial factual questions relating to the qualifications of the applicant or the equipment (or the effects of the use thereof), the Commission may designate the application for hearing. A hearing on an application for an equipment authorization shall be conducted in the same manner as a hearing on a radio station application as set out in Subpart B of Part 1 of this chapter.

§ 2.923 Petition for reconsideration; application for review.

Persons aggrieved by virtue of an equipment authorization action may file with the Commission a petition for reconsideration or an application for review. Rules governing the filing of petitions for reconsideration and applications for review are set forth in §§ 1.106 and 1.115, respectively, of this chapter.

§ 2.925 Identification of equipment.

(a) Each equipment for which an equipment authorization has been granted shall be uniquely identified with a name and type or model number inscribed on a plate or label. The detailed information to be inscribed on this plate or label is set out in the rules for the particular form of equipment authorization required.

(b) The identification plate or label shall be permanently affixed to the equipment and shall be readily visible to the purchaser at the time of purchase.

(c) Where it is shown that a permanently affixed label is not desirable or feasible, an alternative method of positively identifying the equipment may be used if approved by the Commission. The proposed alternative method of identification and the justification for its use must be included with the application for the equipment authorization.

(d) The type or model number specified in the grant of equipment authorization will be identical to that assigned by the manufacturer or applicant and given in the application for the equipment authorization. This number shall consist of a series of Arabic numerals or capital letters or a combination thereof, and may include punctuation marks and spaces. The total of Arabic numerals, capital letters, punctuation marks and spaces in any assigned type or model number shall not exceed 17.

(e) The type or model number assigned to the equipment shall be one which has not been used previously in conjunction with the same name that will be on the equipment.

[§ 2.925 STAYED until 8-2-74; II(72)-5]

assigned to the Secretary of State
doing business in this state and in-
corporation.
government or by this state.

signed to the Secretary of State
Section 14000 of the Financial Code,
National Credit Union Administration
the Department of Corporations.
and by Stats.1976, c. 187, p. —, § 6.)

Amendment. Included certificates
of accounts of credit unions.

PROVISIONS

in accordance with act; prohibition.

Stats. 1967, p. 2279, § 1.

records and correspondence relating
to service contract for a period of not
less than one year of each such contract.

references
Copyright and Literary Property §

in accordance with act; prohibition
the making of, any reference to

hereof to any person or circum-
stances of the title and the application of
the provisions shall not be affected thereby.

INDEXING [NEW]

number; contents of warranty;

Section 923, p. 2029, § 1.

Amendment Services Contracts",
et seq.

deletions or additions by amendment

§ 22410. Definitions

The following terms, as used in this chapter, have the meaning expressed in this section:

(a) "Appliance" means any new television, radio, audio or video recorder, or play-back device normally used or sold for use in the home or in a private-motor vehicle, or any new refrigerator, freezer, range, oven, washer, dryer, dishwasher, room air conditioner, or sewing machine normally used or sold for use in the home, or any new typewriter, adding machine, calculator, or other similar machine, or any electrically operated tool, any of which appliances have a manufacturer's invoice sale value of fifty dollars (\$50) or more.

(b) "Manufacturer" means any individual, partnership, corporation, association, or other legal relationship which is involved in the manufacture, assembly, or production of an appliance or whose brand name appears on any appliance. The term "manufacturer" also means any agent, representative or distributor of a manufacturer who sells, transfers, or exchanges an appliance to or with a retailer. (Added by Stats.1975, c. 923, p. 2029, § 1.)

Section 2 of Stats.1975, c. 923, p. 2030, as amended by Stats.1977, c. 44, p. —, § 3, provided:
"The provisions of this chapter shall become operative on January 1, 1978."

Library references
Trade Regulation § 870.
C.J.S. Trade-Marks, Trade-Names, and
Unfair Competition § 238.

§ 22411. Manufacturer's requirements; serial number; contents of warranty, manual or card

No manufacturer shall sell any appliance in this state unless such appliance has * * * been permanently marked with a serial number unique to * * * that appliance. A marking that is required to be permanent shall be molded, die-stamped, or paint-stenciled or stamped or etched on metal that is permanently secured or indelibly stamped on pressure sensitive labels secured by adhesive that is adequate and suitable for permanent application.

Every manufacturer of an appliance to be sold within this state shall provide on the first page of the warranty or instruction manual, or * * * on a separate card, a description of the appliance providing a space thereon for recording the model number and serial number, the description of the location of such numbers on the appliance, and instructions to the final purchaser of the appliance to record and retain such numbers.

(Added by Stats.1975, c. 923, p. 2029, § 1. Amended by Stats.1977, c. 44, p. —, § 1, urgency, eff. May 10, 1977, operative April 1, 1977.)

Section 1 of Stats.1977, c. 19, p. —, urgency, eff. March 25, 1977, provided:
"Notwithstanding any other provision of law, Section 22411 of the Business and Professions Code shall apply to radios installed at the factory of an automobile manufacturer or to radios which are replaced by such factory radios only on motor vehicles which are manufactured on and after September 1, 1977."
Section 4 of Stats.1977, c. 44, p. —, provided:
"The provisions of this act shall become operative on April 1, 1977."

1977 Amendment. Omitted in the second paragraph the phrase "if no manual is provided" following "or" and substantially re-wrote the first paragraph, which previously read:
"No manufacturer shall sell any appliance in this state unless such appliance has embossed or permanently stamped or cast on its frame, or imprinted or stamped upon a plate which is permanently affixed to such appliance a serial number unique to the particular appliance."

§ 22411.2 Application of § 22411; motor vehicle radios

The provisions of Section 22411 shall not apply to factory or dealer installed radios installed in a new motor vehicle or to radios installed in a motor vehicle by a dealer to replace such factory or dealer installed radios.

(Added by Stats.1977, c. 44, p. —, § 2, urgency, eff. May 10, 1977, operative April 1, 1977.)

INDEX TO
BUSINESS AND PROFESSIONS CODE

See last volume of Code

Asterisks * * * indicate deletions by amendment

Subject Minutes of the Mattel/GTE Meeting of February 9, 1979

Date February 12, 1979

- To * R. Asplund
R. Aukerman
* G. Ault
J. Ballotti
D. Bogart, Mattel
C. Brouse
D. Chandler, Mattel
H. Cohen, Mattel
* G. Derr
* J. Dorin
* F. Fedorko
G. Gopal
* L. Holt
* J. Hunt
* J. Knopp
C. Perry, Mattel
* J. Robertson
* A. Secor, Mattel
* S. Sisak
* R. Smith
H. Sprankle
D. Stone
A. van der Lek
A. Wellisch, Mattel

SYLVANIA

GTE

* indicates attendees

Subject Minutes of the Mattel/GTE Meeting of February 9, 1979
Date February 12, 1979
To List

SYLVANIA

- I. Diagnostic Tester Al Secor discussed the need for, and requested GTE assistance in obtaining a proposal for a diagnostic tester, which would be funded by Mattel, from G.I. GTE
- II. Burn-in The following is a summary of the approach to be used to determine infant mortality and long range reliability predictions:
1. Stress Testing A small quantity of units (3-15) from February production will be used to determine the upper temperature and voltage limits for reliability testing.
 2. Reliability Test A quantity from February production of 100 units in sub-groups of 20 each operating at the limits established in the stress testing analysis until 50% failures are achieved.
 3. Data Analysis Statistical analysis from the data obtained hourly during the reliability test will provide the infant mortality and long range reliability predictions.
 4. Application The infant mortality information obtained from the analysis of the reliability test will provide the base for establishing the credibility of the 100% production testing of the Logic Boards at elevated temperatures.
- GTE will provide a quote for this project by Friday, February 16, 1979.
- III. Review of F. A. Fedorko Telecopy of February 5, 1979 and H. Cohen Telecopy of February 7, 1979 re. problems that need resolution in order to build 250 units in February.
1. Mattel authorized GTE to build 50 Power Supply Boards per artwork that was telecopied to Mattel and amended by telecon from D. Chandler to B. Asplund to include a redundant ground trace. Mattel needs a print of the artwork and one assembled P.S. Board to approve the design for production.
 2. Artwork for Logic Board was picked up at G.I.'s vendor on February 8, 1979.

3. Mattel waived need for top and bottom R. F. Shields on first 50 units, and will send drawings by February 20 for sourcing, not buying, additional parts.
4. Re. Inlay Plain, Inlay Colored and Inlay Disc:
 - a. Mattel will provide color patch for gold. GTE needs date.
 - b. After a telephone review with D. Chandler and C. Perry on the use of Mylar vs. Aluminum, Mattel selected .010" thick aluminum inlays.
 - c. Mattel will supply graphics within a week.
 - d. Mattel has advised that UL and CSA approvals are not required.
5. Serial No. Label and F.C.C. Label Graphics will be supplied by Mattel within a week.
6. Re. Plastic Parts:
 - a. Bob Asplund identified the reinforcing ribs on Rev E cover parts that do not match location on Rev E Drawings.
 - b. Mattel will supply GTE with most recent prints of plastic parts and tooling. GTE needs date.
 - c. East Coast Molding is estimating the tooling capacity of the base and cover at 2,200 units/day which is considerably short of requirements.
 - d. Per Telecon between D. Bogart and J. Ballotti on February 2, 1979, the color of the push buttons will remain black, and the color of all other plastics will be brown per Poly Chrome Formula P/C79 B-7129.
 - e. Confirming Telecon between D. Bogart and J. Ballotti of February 9, 1979, Mattel will ship tooling on February 16, 1979. GTE will advise destination on or before February 13, 1979.
7. GTE will continue to expedite modulators.
8. GTE will continue to expedite screws.
9. Transformers have been submitted for UL approval, which is expected mid-February. Mattel will waive UL approval on first 50 units if necessary.
10. Mattel authorizes Rev 1-29-79 to parts list and asked GTE to identify any obsolescence charges and materials. GTE will respond by February 16, 1979.
11. Re. Chomerics Circuit Assembly approval, Mattel needs drawings and pre-formed parts from Chomerics for approval and approves supply of first 50 to GTE in parallel with approval samples to Mattel.

12. 9-pin Connector delivery remains at March 1, 1979.
13. Mattel has advised that impeller tooling will support production quantities required. Mattel will supply 500 impellers to GTE. GTE needs date.
14. Mattel will source fan bracket and grommet from pilot quantity and will coordinate through Alex Wellisch. GTE needs date.
- 13 & 14. A. Secor advised of the 90% probability that the motor and associated parts will be eliminated. GTE Procurement will hold commitments to best possible minimums.
15. A. Secor approved procurement of 500 plain boxes. Mattel will provide artwork for master carton and artwork for labor for individual carton. GTE needs date.
16. Keith Johnson has identified an East Coast (Clifton, NJ) source for painting. GTE will visit week of February 11, 1979 and coordinate development of specs with Alex Wellisch.
17. Mattel will supply camera ready copy of instruction sheet and GTE will source. GTE needs date.
18. Original Transmission should have read "Poly Sleeve", not "End Cap".
19. End Caps are not tooled. A new drawing which eliminates 1/8" interference was mailed to GTE on February 9, 1979 per Telecon between D. Bogart and J. Ballotti. GTE will source.

With regard to long lead items, the Mattel exceptions to GTE submission are as follows:

Section A - The 11,000 increment (to 16,000 units)

1. Keep Fan Motor to best possible minimum.
15. Keep 18 pin I.C. Socket to 5,000 level.
16. Keep 28 pin I.C. Socket to 5,000 level.

Section B - The 45,000 increment (to 60,000 units)
No exceptions.

Additional long lead items from the missing page in the February 5, 1979 telecopy that require Mattel approval are:

- C. The 70,000 unit increment (to 130,000 units)
1. 74LS27 IC 74-260913
 2. 74LS125 IC 74-260914
 3. 74LS00 IC 74-260941

- D. The 70,000 unit increment (to 200,000 units)
- | | |
|---------------|-----------|
| 1. 74LS27 IC | 74-260913 |
| 2. 74LS125 IC | 74-760914 |
| 3. 74LS00 IC | 74-260941 |

Lastly, an additional long lead item that was omitted on the February 5, 1979 telecopy for Sections B, C, and D out to 200,000 units, is:

- | | |
|---------------------|-----------|
| 1. 256 X 8 RAM 3539 | 74-260911 |
|---------------------|-----------|

Also discussed in the Telecon with C. Perry and D. Chandler was the use of Nytronics RFC-SS-10 chokes rather than Nytronics RFC-L-10 chokes for L1, L2 and L3 on the Logic Board. Bob Asplund explained that the change was necessary since the RFC-L-10 chokes did not physically fit on the Logic Board.

D. Chandler requested and Bob Asplund has verified that the new Logic Boards are designed for the use of Nytronics RFC-SS-10 chokes. GTE needs a parts list revision confirming the specification of these chokes.


IV. Other Items

- Disposition of first 50 units:
 - 15 w/o I.C. Sockets to G.I.
 - 15 with I.C. Sockets to G.I.
 - 3 for stress testing to GTE
 - 17 to Mattel
- Worst Case Tolerance Analysis

There was agreement on the need for this analysis, and that it should be performed by G.I. GTE regards it as a prerequisite to accelerated production.
- G.I. Chip Tester

Availability date now estimated to be March 19.
- Testing First 50 Units

A. Secor expressed his desire to have G.I. personnel at GTE during testing of the first 50 units and requested that we advise him of the date that they should be here.


F. A. Fedorko
Program Manager

February 21, 1979

TO: Alan Secor

FROM: Howard L. Cohen

SUBJ: GTE Meeting of 2/19/79

The following details the main subject matters discussed between myself and the management of GTE Sylvania at the referenced meeting.

As indicated by underlines, there are a number of actions required by Mattel to ensure contract compliance and maintain schedule continuity, cost parameters, or commitments.

I would appreciate your earliest response, as necessary.

- I. SYLVANIA FAR EAST LIMITED (SFEL). Apparently, SFEL management was under the impression, via a meeting between Ed, Jeff, yourself, and Ken Greenberg, that Mattel wanted them to quote on producing the PAL version of the Video and they were awaiting a complete drawing package.

Since this "package" is not available, I told them to quote on the U.S.A. version for concurrent or following year production and to obtain specifications from GTE in Muncy.

SFEL is arranging for Jeff Rochlis to attend their world-wide product management review meeting and to give a physical demonstration of the Video. SFEL needs Jeff to call and confirm availability ASAP.

- II. CONSOLE LABELS. I have carried samples of mylar and aluminum labels to VD. My own observations are that the 7-mil mylar label is clearly less costly, less apt to show marks or scratches, will require less forward commitment, will produce less scrap during production, and is more durable. Cosmetically, the brush mylar is as expensive looking as the brush aluminum.

Additionally, I observed that the present Mattel designed label does not fit properly around the cutouts. Sylvania's mylar vendor will redesign at no cost to ensure a proper fit. A decision on the type and supervision of a redesign of the label is required.

- III. END CAPS (foam). According to Sylvania, the end cap designed by Mattel will not release from the mold. GTE will redesign the end cap, at no cost, and guarantees protection desired and less cost. Someone from Product Engineering should supervise this action.

- IV. FAN MOTOR AND ASSEMBLY. Lead times and minimum order quantities for the fan motor may require a 20,000 blanket order commitment. The fan motor specified has not been approved.

At present, 125 units are due 2/26/79 and 125 pieces are due 3/7/79. Sylvania has been told that 300 hours of testing on the motor specified has been completed, but no approval received. Lead time, using airfreight, is 9 weeks. We are attempting to reduce quantity and lead time, but may not be successful. Approval to commit to 20,000, following approval of the motor, should be reviewed immediately.

- V. BURN-IN AND RELIABILITY PROGRAM. Sylvania has urgently requested a meeting between Mattel Engineering, G.I., and themselves to resolve reliability program definition (including burn-in methods and testing levels. According to Sylvania, a tentative meeting was scheduled for 2/26 and 27 by yourself.

The urgency of the meeting is precipitated by the limited availability of Dave Christian, a TV Division reliability engineer that is an expert in this field. He is unavailable after 3/1/79.

Sylvania requests your immediate confirmation of the planned meeting.

It is important to note that the costs of this test program are not included in the present price. Additionally, the true cost impact can not be determined until after the infant mortality data is accumulated and analyzed (essentially phase II of this program).

- VI. PLASTICS. Sylvania has not received color information for the console and are confused about direction to follow. The prints call for a black console and they did receive a black color formula. However, the samples provided to them were brown. They have been told the console will be brown (unverified source) but have not received a color chip. The prints should be updated or verified and proper support provided (color chip) immediately.

- VII. PLASTICS TOOLING. According to Sylvania, ECMO has stated that the housing tools can produce a maximum of 2200 units per week. The tool plan originally stated a 3750 per week Run Rate and the production schedules negotiated were based on this rate as the limiting item. This rate does not support the schedule as presently detailed in the contract and as modified for amendment to the contract per the information provided by you. Sylvania could requote labor costs if the schedule is reduced (as a design change). The true running rate and/or a plan for banking parts should be determined immediately. Additional long-term capability analysis should also be made.

- VIII. CONNECTOR TOOLING. Circuit Assembly does not provide line tooling for connector wiring attachment. No tooling was planned or is available. I've instructed them to design and quote tooling necessary. Production Engineering should supervise the design and evaluate the costs (make or buy, as well).
- IX. BASE PRICE INCREASE OF \$4.62 PER UNIT. The increase of \$942M was challenged. A breakdown of changes was provided by Sylvania. I will have the costs evaluated and negotiate as appropriate. I need a cognizant engineer to review the changes listed for accuracy. Additionally, recent changes (which will be the basis for amendment number 3) should be reviewed and costed prior to Sylvania's request for an increase and concurrent with the present change to provide negotiation leverage.
- X. PROTOTYPE BUILD COSTS. A \$1,000 savings was made by questioning the basis for costing. The price of \$280 per unit was reduced to \$260 per unit. I would like to suggest that future commitments be quoted and negotiated if time permits. A Purchase Order is needed to enable Sylvania to ship these to G.I. per the schedule requested by Mattel. I authorized shipment without paperwork.
- XI. INCOMING CHIP TESTING. Present costing (contract price) includes an incoming sampling of chips using a G.I. supplied tester. Any additional testing will have a cost impact. Additionally, kitting of chips, if required, will have a cost impact as well as a scrap or rejection impact at incoming and on-line. Mattel's plans should be defined soon as these actions will also impact the pending G.I./Mattel Purchase Agreement negotiations.
- XII. SHIELDS. Sylvania claims that you committed to supplying drawings for shield sourcing by 2/20/79. To date, they have not received any drawings.
- XIII. CHOKES. Sylvania claims that they have conflicting verbal directions on choke resistance levels, including waivers for initial production. These specifications should be detailed and confirmed in writing.
- XIV. PCB PRODUCTION. Sylvania will provide me with EOQ's and their volume production plans so that Mattel can analyze in relation to potential cost reduction redesigns (without incurring costs for obsolescence or low-volume production).

XV. CARTRIDGE PCB'S. Sylvania has multiple directions for initial production of cartridge PCB's. They have guessed at a 200 piece quantity, with artwork approved by Perry on 2/16/79. The cost is quoted at \$1.50 each board with \$425.00 tooling. They need a Purchase Order to support production. Per your request, they quoted 5000 of these boards, per their redesign, at \$1.20 each. They stated that leadtime is critical. The price is for bare boards only. An assembled price can not be quoted without purchasing's direction on material parameters.

I will instruct Chi Wang to detail the assembly situation. Basically, this will include consigned ROM's to be 100% tested, supplied plastic and paper and packaging, and will involve the football cartridge only. Simultaneously, I will have Denny Bogart lay out a schedule for the earliest possible supply of parts. The costs for assembling will be quoted by Sylvania within 3 days of receipt of the information.

Sylvania wants to requote the entire cartridge business again. They claim that they did not get a fair shot. Purchasing did give them ample opportunity to requote their prices and even lent them aid. However, another costing exercise will be performed to satisfy their request and to ensure that Mattel is getting the best value.

- end -

Other subjects, including FCC build plan and schedule and 22 unit prototype costs and uses, were discussed. None of these require immediate action and it is my understanding that you are aware of the plans and decisions made.

If you have any questions, please contact me.

cc: Fred Held
Jeff Rochlis
Denny Bogart
Dave Chandler

Howard

MATTEL ELECTRONICS

February 22, 1979

TO: Howard Cohen
FROM: Clif Perry *C.P.*
SUBJECT: COMPONENT APPROVALS

Please inform GTE CMO that the following Intellivision components are approved and production purchasing may begin:

2609-0640 Rev A	Motor	Supplied by Mabucci
2609-9589 P.R.	Circuit Matrix	Supplied by Chomerics
2609-6379 P.R.	Legend, Domed	Supplied by Chomerics
2609-4019 P.R.	Spacer, Mylar	Supplied by Chomerics

Engineering suggests that ordering of the motor and domed legend be as conservative as possible initially because the motor may be designed out and off tool samples of the legend have not been seen by engineering.

CP/lw

cc: Dave Chandler



MATTEL ELECTRONICS

February 23, 1979

TO: Arnie Fine
FROM: Clif Perry C.P.
SUBJECT: INTELLIVISION PACKAGING PROBLEMS

In conversations with the purchasing department at GTE Sylvania (assembler of our Model 2609 Intellivision Game) the following items related to our packaging have come up and need attention from our physical design group.

1. 2609-0810 Rev A end cap - GTE's suppliers say that part is over-designed for application and the rib design causes tool problems.

They are going ahead with one of their suppliers to design a whole new end cap which will be cheaper and still do the job. Samples for our appraisal will be ready in a few days.

2. 2610-0910 Rev C cartridge box - dimensions on drawing do not agree. The over all flat part length of 24 13/16 inches does not agree with the cumulative dimensions of the individual panels.
3. 2609-0970 label - GTE's suppliers claim we have specified a paper that is too heavy and they fear cracking at the corners.
4. They have no information as to how we intend to pack the various items inside the individual carton such as RF cable, cartridge, antenna switch box and instruction book.

Would you contact John Knopp at (717) 546-3191 at GTE Sylvania and follow through on these items.

CP/lw

