

Music Room
Building 21
Tuesday
January 21, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, A. A. Manchester, G. C. Harris, P. J. McGee, F. F. Holly, A. J. Rhaines, W. H. Arrowsmith, R. Burns, E. Haker, W. A. Hardy, J. F. McCarthy, W. O. Olson and E. Trautwein. The following subjects were taken up:

1. Minutes of the previous meeting were approved as issued,

2. Power Transformers:

(a) Open Air Unit: Mr. Harris submitted a report which showed that it would cost .0715¢ more per chassis to convert the remaining sets on order this year to the open air type. He further stated that this unit had been tested with 115 volts on the 105 volt tap when installed in our present can without additional ventilation, and that the temperature rise had remained within safe limits. In view of this increased cost and the improved method of breakdown testing of the high voltage winding to core, it was tentatively decided to drop consideration of changing to the open air unit in the present models. However, Mr. Rhaines is going to make a further investigation of the above mentioned breakdown test to be sure that no defective transformers can get out into the field.

Mr. Harris is going to conduct further tests with a view to determining the temperature rise when 130 volts is applied to the 105 volt tap but this subject is being referred to the 1930 Chassis Design Committee. An investigation is also being made in regard to the possibility of using a voltage regulator in place of the present taps. Mr. Olson stated that he believes the design of the brackets could be somewhat simplified.

(b) 25 Cycle Transformer: Mr. Harris stated that the 25 cycle transformers now in stock were being reworked by the Splitdorf Electrical Company to avoid the danger of breakdown between the windings and the core. A few of the laminations are being removed and fiber blocks substituted. This is due to the fact that the greatest number of failures occurred where the laminations cut into the windings where the windings went around the corners of the laminations. The transformers will also be subjected to a high voltage breakdown test and a test to determine possible short circuited turns. This procedure was deemed to be satisfactory.

3. Underwriters' Requirements:

(a) Connecting Cable - Mr. Holly stated that approval was expected next week.

(b) Guards for Phonograph Motor - Mr. Harris reported that sample guards had just been received from Mr. Berggren and would be forwarded to the Underwriters' Laboratories for approval.

4. Noisy Grid Leaks: Mr. Harris had nothing further to report but Mr. Rhaines stated that he had tested 100 leaks picked at random from stock and has found them to be O.K. Mr. McGee requested that the test be continued further and that the grid leaks be given a careful mechanical inspection to make sure that the lead wires were properly located near the ends of the resistors and that they were not loose. Mr. Harris will issue a specification in regard to the location of the grid leak in the set as it has been found that this is an important factor in producing noise.
5. "Lost" R. F. Coil Assemblies: Mr. Haker submitted a report which showed that all of the R. F. coils were now accounted for and that 9,296 coils, or 3.6% of the total, were listed as having been junked.
6. Extra Cost Due to Obsolete Material in 1929: Mr. Haker will report on this at the next meeting.
7. Manufacturing Bill of Operations: Mr. Manchester turned this over to Mr. Trautwein today.
8. Inspection Bill of Operations: Mr. Rhaines reported that this was not yet completed but would be turned over to Mr. Trautwein before the next meeting.
9. Compensating Condensers: No report was yet available on the chassis which was being shipped back and forth from Silver Lake to Orange, to determine possible loosening up of the compensator screws. Mr. McGee said that he had received a letter from Buffalo in answer to his request concerning the method of correcting the compensation of sets received in an unbalanced condition. In each of the four or five cases reported, it was found necessary to decrease the capacity which indicates that the compensator screws were probably not responsible for the trouble. This led to the request that Mr. Harris make careful tests on several chassis to determine if any other parts of the tuning system are loosening up and shifting in transit.
10. Change Notices:
 - R-235 Reissue. Correction in assignment of a block of serial numbers to 25 cycle receivers to read No. 750,000 to 751,000.
 - R-239 7 R Radio Model Volume Control Assembly. Change in method of lacing and wiring minimum bias lead to eliminate interference with phonograph switch. Cost. .015¢ per chassis.

There being no further business, the meeting adjourned.

Copies to: Chas. Edison W. W. Cowan R. Burns
T. M. Edison F. F. Holly E. Baker
R. H. Allen John Holle H. Lanahan
A. L. Walsh A. J. Rhaines J. F. McCarthy
A. A. Manchester W. J. Arrowsmith C. S. Williams
C. T. Jacobs C. H. Sevrain C. F. Schweitzer
F. J. McGee E. H. Richards G. Eaton
G. C. Harris W. Hildebrand
W. O. Olson E. Trautwein File

E. Trautwein, Secretary.

January 21, 1930.

REPORTS TO BE MADE AT NEXT MEETING

(In making reports, please bring in a typewritten summary which will be suitable for incorporation in the minutes of the meeting.)

Mr. Rhaines	Paragraph 1	Power Transformer - Open Air Unit
Mr. Holly	" 3	Underwriters' Require- ments Connecting Cable
Mr. Harris	" 3	Underwriters' Require- ments - Guards for Phonograph Motor
Mr. Harris	" 4	Noisy Grid Leaks
Mr. Baker	" 6	Extra Cost due to obsoleting Material in 1929
Mr. Rhaines	" 8	Inspection Bill of Operations
Mr. Harris & Mr. Rhaines	" 9	Compensating Condensers
Mr. Olson	" 10	Change Notices
Mr. Rhaines	Inspection Charts	
Mr. McGee	Service Charts	
Mr. Shearman	Palnuts	

Music Room
Building 21
Tuesday
January 28, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, A. A. Manchester, G. C. Harris, P. J. McGee, F. F. Holly, A. J. Rhaines, W. H. Arrowsmith, R. Burns, E. Haker, W. A. Hardy, J. F. McCarthy, W. O. Olson, Cosden, and E. Trautwein. The following subjects were taken up:

1. Minutes of the previous meeting were approved as issued.

2. Power Transformers:

(a) Open Air Unit: An Open Air Transformer of Kolster manufacture was brought into the meeting to illustrate its construction. The good features of this transformer were set forth by Mr. Rhaines, who has had the opportunity to observe the transformer under actual working conditions at the Kolster factory. Among its good features are accessibility, lack of messy compound fillings, a number of the parts could be salvaged and the temperature would not run beyond safe limits, as better ventilation could be given the Open Air type of transformer.

The failures Mr. Rhaines stated were about 5% in the Kolster transformer. As he had no actual figures at hand, he gave this figure from memory. The failures he thought might run considerably less than 5%.

Mr. Harris stated, the cost of dies for mounts for an open air transformer of the type under consideration would make the cost of producing the mounts excessive.

Redesign of the mounts he stated would reduce the cost.

Mr. Holley will obtain cost estimates as a basis for manufacturing costs on an open air transformer of suitable type.

(b) Power Transformer 25 cycle: 25 cycle transformers, tests made by Mr. Rhaines, using 700 volts A. C., showed with few exceptions that the primary winding broke down under the test, about 30 - 60 cycle transformers tested O. K. The transformers tested were supplied by the Service Dept. The total of 151 transformers were tested.

Further tests will be made.

25 cycle transformers are urgently needed for field service. An effort should be made to speed up production of this type of transformer.

3. Underwriters' Requirements:

(a) Connecting Cable - Mr. Holley had no report to make. He stated he expected word from the Underwriters and hoped to be able to report at the next meeting.

(b) Phono Motor Guards - Mr. Harris supplied sample guards for Underwriters inspection, No decision has as yet been received from them.

4. Noisy Grid Leaks: Noisy Grid leaks were the subject of considerable discussion. The cause of noisy grid leaks (air rush) remains an unsolved problem, which will probably necessitate considerable investigation. Mr. Rhaines stated in some cases the noise is slight, increasing after from 5 to 10 minutes operation. Mr. Jacobs stated the rushing noise could be caused by one or more things several of which he mentioned. Other members of the committee mentioned cures or near cures for noisy grid leaks. As no definite decision on the real cause of the trouble could be reached, tests will be made by a committee consisting of -
Messrs: Jacobs
Harris
Rhaines
McCarthy.

5. Extra Cost due to Obsolete Materials in 1929: Mr. Haker submitted a report which, while not complete, shows such costs as can be given to date. Costs of reworking sets at Silver Lake - and other shop orders for correction work were not included in the report.

This report is on file with the Secretary.

6. Inspection Bill of Operations: Mr. Rhaines handed the Secretary an Inspection Bill of Operations which is on file.
7. Compensating Condensers: Mr. Rhaines stated sets shipped back and forth to Silver Lake showed very little change in "gain characteristics".
8. Change Notices:
- R-240 Detector socket assembly. Proper location of part 34961 - .000125 M.F.D. condenser and 34779 - 1.5 megohm resistor on assemblies 200051 and 200228. No cost.
 - R-241 Line tap terminal. To connect line tap lead to 125 volt tap instead of 115 volt tap. To prevent excessive voltage on tubes in high voltage areas.
 - R-242 Panel brace assembly. Change in assembly. Parts of this assembly will consist of part #34072 and part #34074.
 - R-243 Volume control and Switch Assembly. changing ground lead on the bias section of volume control to center lug. This change also effects assembly 200242 (for service only.)
 - R-244 Chassis Harness and connecting cable ass'y 60 cycle - 25 cycle - S. S.
To remove lead #6-200521 and to lengthen lead #6-1 $\frac{1}{2}$ " which becomes part #200616 - 19 $\frac{1}{2}$ " long.

9. Inspection Charts: Mr. Rhaines brought in Inspection charts. These charts showed a considerable increase in mechanical troubles.

Mr. Edison questioned the reason for this increase in mechanical troubles from 30% when we had a big force at work to 40% with a small picked crew on present production.

With this condition existing at present Mr. Edison said this presented a problem and cause for serious consideration, lest this condition continues along into New Chassis production, with a full force of less efficient workers.

Mr. Manchester explained that the R. F. Coils were responsible for the increase of mechanical troubles. Loose wire, open windings, wire not clean, giving trouble in soldering etc. These and other contributing causes were mentioned.

Twin coupler is to be advised of the above with a view toward correction.

In connection with the Inspection charts, Mr. Edison requested certain items not represented on the charts be added.

Mr. Rhaines will show these items of which he made note.

10. Service Charts: Mr. McGee presented Service charts and a report on number of parts used to date for servicing L.O.M. Radios. The Service Charts showed a decrease of service complaints due to failure of the various component parts.

The 25 cycle transformer being the chief offender and outstanding cause of grief.

11. Palnuts: Mr. Shearman had received no further reports on conditions after arrival of sets, which had chassis secured in cabinets with palnuts.

A further follow-up and reports are requested for future reference.

12. New Business: Line voltage tap setting: Change of setting of line voltage to 115 volts, was under consideration. Opinion differed on the wisdom of making this voltage setting. After several suggestions for the use of switches amperites and voltage regulation tubes it was decided to refer the matter to Mr. McGee and Mr. Harris who would consult with Mr. Walsh and obtain his views on a voltage regulating device.

13. R. F. Coil Tolerances: Mr. Jacobs stated it is impossible with new type coils to hold to correct dial calibrations. Error in new set being greater, he suggested tolerance of 1% of frequency at all points on the dial.

This would save coils and dials.

Mr. Harris will issue change notice + or - 1% frequency, over entire dial.

Copies to:	Chas. Edison	W. W. Cowan	R. Burns
	T. M. Edison	F. F. Holly	E. Baker
	R. H. Allen	John Holle	H. Lanahan
	A. L. Walsh	A. J. Rhaines	J. F. McCarthy
	A. A. Manchester	W. J. Arrowsmith	C. S. Williams
	C. T. Jacobs	G. H. Sevrain	C. F. Schweitzer
	F. J. McGee	E. M. Richards	G. Eaton
	G. C. Harris	W. Hildebrand	File
	W. O. Olson	E. Trautwein	

E. Trautwein, Secretary.

January 29, 1930.

REPORTS TO BE MADE AT NEXT MEETING

(In making reports, please bring in a typewritten summary which will be suitable for incorporation in the minutes of the meeting.)

Mr. Harris)	Paragraph 2	Open Air Transformer
Mr. Holley)	" 2	Costs " "
Mr. Rhaines	" 2	Tests - 25 cycle "
Mr. Holley)	" 3	Underwriters
Mr. Harris)	" 3	requirements
Messrs: Jacobs)	" 4	Noisy Grid Leaks
Harris)		
Rhaines)		
McCarthy)		
Mr. Rhaines	" 8	Inspection Charts
Mr. McGee	" 9	Service Charts
Mr. Shearman	" 10	Palnuts
Mr. McGee)	" 11	Line Voltage
Mr. Harris)		regulation device
Mr. Harris	" 12	Change Notice
		R. F. Coil Tolerance

From minutes of Meeting held Jan 29th.

Music Room
Building 21
Tuesday
Feb. 4, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs: R. Burns, A. A. Manchester, C. T. Jacobs, P. J. McGee, G. C. Harris, W. O. Olson, W. W. Cowan, F. F. Holley, John Holle, A. J. Rhaines, W. B. Arrowsmith, E. Haker, J. F. McCarthy, and E. Trautwein.
The following subjects were taken up.

1. Minutes of the meeting held January 28th were approved with a correction in paragraph five, as follows:

Correction: Extra cost due to Obsoleting Materials in 1929. This paragraph should read as follows: Mr. Haker submitted a report which was complete. Costs of re-working sets at Silver Lake and other shop orders for correction work in process, could not be included in the report.

2. Open Air Transformer. Mr. Harris and Mr. Holley stated, brackets for open Air transformers were not yet ready. Only one bid had been received on brackets.

Mr. Olson has a design ready for approval and this will be taken up at the Chassis Design Committee Meeting.

3. Twenty-Five Cycle Transformers Mr. Rhaines reported on the progress Splitdorf is making in production of revised model of twenty-five cycle transformers. Tests he has made of this transformer show up very favorably. A statement of progress is a favorable reply to the request of the Service Department for an early supply of twenty-five cycle transformers to fill service needs.

4. Underwriters' Approval A small supply of labeled cord is necessary for submittal to and approval of the Underwriters. This supply is to be obtained and supplied to the Underwriters. Mr. Holley was unable to make a report owing to the above.

Mr. Harris stated guards for the phonograph motor have been supplied to the Underwriters. Every effort is being made to obtain approval of the guards submitted. Mr. Harris also stated he had received an approval on the Line Cord and Plug for the radio-phonograph model. Further approval will be obtained from the Underwriters on the phono motor.

5. Noisy Grid Leaks Mr. McCarthy speaking for the committee, who had under consideration, noisy grid leaks, could make no definite report owing to the real cause of noisy grid leaks still being unknown.

One hundred tested grid leaks were sent to Silver Lake for use in replacing noisy grid leaks.

Mr. Harris stated he thought the grid leaks we are using are not so quiet as Continental and Durham.

Mr. Rhaines stated grid leaks tested by him are within the ohmic limits of resistance specified. He thought the wire lead on the resistor was making poor contact on the finned portion of the carbon element.

He further stated that some of the noisy grid leaks tested had been set aside and may be used later if conditions show that these grid leaks are not entirely responsible for the Air Rush which is causing the complaint of noisy grid leaks.

Mr. McCarthy stated that Mr. Jacobs suggested the use of two grid leaks in parallel. This was tried out and was found to cause oscillation in some instances and necessitated retuning and recompensating.

The investigations made by Mr. Harris would indicate that replacement of the grid leak, using a Durham grid leak proved a remedy for noise.

As this is still an open question, no definite decision on the real cause of trouble having been reached, further investigation of this matter will be made by members of the committee consisting of Messrs: Jacobs, Harris, Rhaines and McCarthy.

6. Inspection Charts Mr. Rhaines presented Inspection charts which showed in graphs and figures, mechanical failures which were noted during inspection operations.

In line with Mr. Edison's suggestions at the previous meeting, Mr. Rhaines showed on these charts, some of the points which Mr. Edison suggested be brought out. The inspection charts in some instances showed slight increases in mechanical difficulties.

Mr. Rhaines has these charts open for inspection.

7. Service Charts Mr. McGee presented service charts showing graphs and figures compiled from Field Service Reports. Jensen speaker heads showed the biggest increase in mechanical failures.
8. Palnuts Mr. Shearman could make no further report on Palnuts other than what he had submitted to a previous meeting.

Mr. McCarthey who is associated with Mr. Shearman in this test of Palnuts stated, that owing to the cost of special tools to remove and replace Palnuts, the test was abandoned, as a split lock washer is being used to accomplish the purpose, at less cost.

9. Line Voltage Control Tap Adjustment Mr. Harris stated a further report will be made on this matter under the heading of Power Transformers.

At the next meeting of the Chassis Design Committee, line voltage tap adjustment will be up for discussion and decision.

10. CHANGE NOTICES

R-243 Volume Control and Switch Assembly, part #200,245.
Change of ground lead on the bias or rear section of volume control to the disc or center lug. This change also effects assembly number 200,242 (for service only). 1,267 Assemblies to be re-worked.

Cost: For re-working finished assemblies - 0.01 cent per assembly. Future production cost will be the same as previous to change.

R-244 Chassis Harness & Conn. Cable Assembly - part #34,099.
That lead # 6 - 200,521, 18" long Green 7 S #32 wire has been removed from the cable assembly.

That lead # 6 has been lengthened $1\frac{1}{2}$ ", and is now part # 200,616 - 19 $-\frac{1}{2}$ " long Green 7 S #32 wire (ref. to Eng. Notice #239)

Cost: 0.0047 cents per chassis.

R-247 Dial Calibration - part # 34,472.

That the following tolerance has been established for calibration of 7-R receivers.

Plus or minus 1% at any frequency.

This notice cancels Engineering Notice R-226.

To establish a standard calibration and overcome service trouble in the field.

R-248 Combination Notice - part #200,065.

That the gummed label is to be affixed to the lower shelf of the cabinet directly behind the Power Unit Name Plate.

Cost: 0.0021 cents each.

Object: To comply with Underwriters' Requirements.

R-250 Parker-Kalon Screws - part # 34,513.

that the above screws can be used to replace the #3, Part #34,514 to mount the R. H. & L. H. Condenser Shields and the Rear Plate, making a total of fourteen screws.

Saving: 0.035 per chassis.

To dispose of stock on hand which is sufficient for 10,000 sets.

11. There being no new business to come before the Committee, the meeting adjourned.

The next meeting will be held in the Music Room on February eleventh at ten o'clock A.M.

Please submit in writing any reports that are to be made.

E. Trautwein, Secretary.

Copies to: Messrs:

Chas. Edison	F. F. Holley	R. Burns
T. M. Edison	John Holle	E. Haker
R. H. Allen	A. J. Rhaines	W. Hardy
A. L. Walsh	W. B. Arrowsmith	J. F. McCarthy
A. A. Manchester	G. H. Sevraine	C. S. Williams
C. T. Jacobs	E. M. Richards	C. F. Schweitzer
P. J. McGee	W. Hildebrand	G. Eaton
G. C. Harris	E. Trautwein	A. J. Clark
W. O. Olson		W. R. Kurtze
W. W. Cowan	C. Luhr	F. Bostock
G. O. Cosden	H. B. Nielsen	J. Greeley
Mr. Kother	R. Sommers	Mr. Berggren

February 4, 1930.

REPORTS TO BE MADE AT NEXT MEETING

(In making reports, please bring in a typewritten summary which will be suitable for incorporation in the minutes of the meeting.)

Messrs. Harris and Holley	Paragraph 2	Open Air Power Transformer
" " " "	" 4	Underwriters' Approval
Messrs: Jacobs, Harris, Rhaines and McCarthey	" 5	Grid Leaks
Mr. Rhaines	" 6	Inspection Charts
Mr. McGee	" 7	Service Charts

* From minutes of meeting held February 4th.

MUSIC ROOM
Building 21
Tuesday
February 11, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. P. J. McGee, R. Burns, A. A. Manchester, G. C. Harris, W. B. Arrowsmith, W. W. Cowan, J. F. McCarthy, and E. Trautwein.

1. Minutes of the previous meeting were approved with a correction in paragraph eight. The correction is as follows: Palnuts are eliminated from further discussion, for reason a lock washer has been substituted at less cost as it is fully as affective as a means for preventing chassis holding bolts from becoming loose during shipment of radio sets.

2. UNDERWRITERS' APPROVAL

Wire. The Production Department has on hand a quantity of wire which meets with the Underwriters' approval and which can be used in production.

Plugs. At the present time there is a shortage of brown plugs. There being some black plugs on hand, it may be necessary to use these plugs in production. Mr. Holley stated, he will have brown plugs in by Thursday to take care of production needs.

Motors. Mr. Harris stated, Mr. Neilsen had been to see the Underwriters with a view to obtaining their approval. He feels confident that their approval will be given on the motor. Mr. Holley who has a friend who may have influence with the Underwriters, stated that he would ask this friend to use his influence in an effort to obtain the approval of the Underwriters.

3. GRID LEAKS

Mr. McCarthy submitted a report on twenty chassis which were rejected in the past week at final inspection at Silver Lake, for Air Rush.

After new grid leaks were installed, 18 passed the final inspection O.K. The two sets rejected for causes "Traceable to change of grid leaks", were held for his attention.

On February 10th, Mr. McCarthy's report states that five chassis were rejected for Air Rush. Inspection and adjustment of these sets showed the following. Chassis #742,202 - Replaced grid leak - result O.K. Chassis #742,124 - Upon reinspection - O.K. Air Rush - caused by shot effect from detector tube - Chassis #741,206 - Air Rush - No variation on detector hum adjuster. Chassis #741,415 - Air Rush - Replaced grid leak.

4. INSPECTION CHARTS

No report.

5. SERVICE CHARTS

Mr. McGee presented charts and figures.

6. ENGINEERING CHANGE NOTICES

R-245 VOLUME CONTROL ASSEMBLY - Part #200,065

7-R Models (For Service Replacement only)

ASSEMBLY CONSISTS OF FOLLOWING PARTS:

- #200,212 - 1 Volume control #200,231 - 1 Vol. Cont. Switch Bracket.
- #34,833 - 1 Radio-Phono Switch
- #34,088 2 #6-32 x 3/16" C/P. Headless set screw.
- #34,859 - 1 arm assembly #16,319 1 Washer #6 Lock
- #200,527 - 1 wire, - 7 S #32 bare tinned
- #200,752 - 1 Spaghetti, 1 M M #200,059 - 1 Switch Nut

R-246 THIS NOTICE CANCELS ENGINEERING NOTICE

#R-241.

#R-251 MACHINE SCREW 6/32 x 3/16 R.H.N.P. Part #34,990
for 7-R Receiver Unit.

Above screw can be used to replace #34,991,

Machine Screw, 6/32 x 5/16" R.H.N.P.

SAVING COST OF 70,000 SCREWS. (\$24.50) which would
otherwise be lost due to supply on hand.

R-252 COIL AND LAMINATION ASSEMBLY OF POWER TRANSFORMER

8-P S.S. & 60 Cycle Power Unit - Part #200,217

Wire #200,594 and Spaghetti #200,759 used in wire

and lug assembly #200,255 (Used on coil and

lamination - Assembly #200,217) has been omitted.

SAVING. .014 per assembly. To decrease production
cost.

R-253 Lockwasher #6 - Part #16,319.

For 7-R Receiver Units.

The above lockwasher used when mounting the condenser

shield cannot be used, and is not necessary when

Engineering notice R-250 is put into practice.

Saving. \$15.00 on 10,000 sets. Object: To use surplus.

R-254 LINE CORD AND PLUG ASSEMBLY - Part #34,221.

8-P Power Unit All Models.

The wire used in above assembly must be approved

by Underwriters' Laboratories.

Drawings #34,221 Change "C"

Drawings #34,214 Change "G"

Reason. To comply with Underwriters' Requirements.

7. LEGAL INVESTIGATIONS

Mr. Hardy of the Legal Department commented upon Transformer Laminations, Dial Mechanisms, and Knobs. He inquired regarding type "B" and "EI" transformer laminations. Mr. Harris stated, drawings of both types were out for price estimates.

Mr. Hardy said, there was no legal obstacle that would prohibit the use of the "B" type and so far as he could find the "EI" type were not patented.

Mr. Harris will try to find out if the "EI" type is patented.

Dial mechanisms. The 1929 model dial is covered by patents. Mr. Hardy thought we would have to obtain permission from Martin Copeland if we use this dial mechanism. Mr. Hardy will investigate further.

Stopping device. Mr. Harris thought there was no patent on the stopping device. However, should we make use of this device, Mr. Harris said he would make certain that there was no legal obstacle to its use.

Knobs. Mr. Hardy showed a knob which contained a spring friction grip. He stated that this was patented feature in the knob. Mr. Harris stated, he had been in touch with a representative of the knob company and was informed that they had a license to use this type of knob. Probably other companies have licenses to use this spring friction grip in knobs of their manufacture.

8. SAMPLE CHASSIS' (NEW DESIGN)

Approval was given at the February seventh meeting of the Chassis Design Committee for the construction of twelve chassis' six of which were to have dials of the type presented by Mr. Harris and six to have dials of the type developed by Mr. Eaton. Mr. Harris will prepare these chassis' which will be put thru certain tests to be determined at a later date.

At todays meeting of the Radio Committee, approval was given for the construction of fifty chassis' of the new design. These chassis' are to be distributed among various people in various locations which will be decied upon at a later date. The purpose of this distribution will be to obtain the reactions of the various people to whom these chassis will be consigned and to form a basis for corrective measures necessary before placing the set in production.

To permit these sets to be built, one hundred sets of parts will be obtained to insure sufficient parts for fifty sets. Mr. Harris and Mr. Haker will cooperate in obtaining the necessary parts.

Mr. Manchester will have these sets built.

There being no further business to come before the committee, the meeting adjourned.

Please submit in writing any reports that are to be made.

The next meeting will be held in the Music Room on February eighteenth at 10 A.M.

E. Trautwein, Secretary.

Copies to: Messrs:

Chas. Edison	F. F. Holley
T. M. Edison	John Holle
A.L. Walsh	A. J. Rhaines
A. A. Manchester	W. B. Arrowsmith
C. T. Jacobs	E. M. Richards
P. J. McGee	R. Burns
G. C. Harris	E. Haker
W.O. Olson	W. Hardy
W. W. Cowan	J. F. McCarthy
C. S. Williams	E. Trautwein
J. A. Shearman	R. R. Karch

February 11, 1930.

REPORTS TO BE MADE AT THE NEXT RADIO COMMITTEE MEETING

(In making reports, please bring in a typewritten summary which will be suitable for incorporation in the minutes of the meeting)

Mr. Harris	Paragraph # 2	UNDERWRITERS' APPROVAL
Mr. McCarthy	" # 3	GRID LEAKS
Mr. Olson	" # 6	ENGINEERING CHANGE NOTICES
Mr. Rhaines	" # 4	INSPECTION CHARTS
Mr. McGee	" # 5	SERVICE CHARTS
Mr. Harris } Mr. Hardy }	" # 7	LEGAL INVESTIGATIONS
Mr. Harris } Mr. Manchester } Mr. Haker }	" # 8	NEW CHASSIS DESIGN (SAMPLE CHASSIS)

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From minutes of Radio Committee Meeting February, eleventh.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs: R. Burns, T. M. Edison, A. A. Manchester, P. J. McGee, G. C. Harris, W. O. Olson, F. F. Holly, J. Holle, A. J. Rhaines, W. W. Cowan, W. B. Arrowsmith, E. W. Baker, W. Hardy, J. F. McCarthy, and E. Trautwein.

1. THE minutes of the meeting of February eighteenth were approved with the following correction in paragraph two of the previous meeting.

CORRECTION: Further amplification was requested to paragraph two of the minutes of February 11th with regard to Underwriters' approval as the minutes as now written might be subject to misinterpretation. Mr. Harris wished to point out that we were making efforts to meet every requirement of the Underwriters' Laboratory and Mr. Holly's statement referred only to the possibility of speeding up the work of getting the Underwriters' Approval on certain items which were lagging.

2. UNDERWRITERS' APPROVAL

Approval has not yet been obtained on guards for the phonograph motor. Mr. Harris stated, we will probably get final approval before the next meeting.

Mr. Holly said, it may be necessary to send the line cord back for approval.

Mr. McGee asked to have the tone arm grounded. Mr. Harris has taken this matter up with Mr. Berggren and a change notice will be issued.

3. GRID LEAKS

Mr. McCarthy said the supplier will take back the defective grid leaks and a new supply of perfect grid leaks will be furnished by the supplier to replace the defective ones.

4. INSPECTION CHARTS

Mr. Rhaines presented inspection charts which showed a higher percentage of O.K. sets going thru the production line.

5. SERVICE CHARTS

Mr. McGee presented service charts and a report on parts shipped for service during the past week, as follows:

LOM Contact Assemblies	59
POWER TRANSFORMER (Sixty Cycle)	68
VOLUME CONTROLS	579
JENSEN SPEAKER HEADS	492
Second Audio Transformer	82
A. C. Switches	184

Mr. Rhaines found six power transformers O.K. out of 110 returned from the field and tested by him.

6. BILL OF MATERIALS

Mr. Edison made inquiry regarding certain items on the bill of materials which were released by the committee at the February 21st chassis design meeting.

Mr. Edison and Mr. Harris will discuss these items with Mr. Jacobs.

7. AUDIO TRANSFORMERS

A Sub-committee consisting of Messrs. Harris, McGee, Rhaines and Holle submitted a report which was approved and is on file.

8. ARM AND MOUNTING FOR SWITCH

This is still an open question to be settled by the Engineering and Sales departments.

9. CANS FOR FILTER CONDENSER AND BALLAST

There being a question of dimensions of the cans, Mr. Harris will take up this matter with Splitdorf Electric.

10. BASE OF POWER PACK

Mr. Harris stated, complete drawings for power pack base will be ready on Wednesday February 26th.

11. ENGINEERING CHANGE NOTICES

R-257 MOTOR GROUND LEAD ASSEMBLY Part #30979

OBJECT: To ground pickup arm to the phonograph motor.

COST per Assembly \$.08.

R-258 DIAL LAMPS Part #34,531 & 32,316

OBJECT: To cancel Engineering change notice R-135, specifying use of Amberoid cement in the assembly of the dial lamps.

To facilitate changing lamps in service.

12. POWER TRANSFORMER LAMINATIONS

Mr. Holly has not as yet obtained costs on the "B" type laminations. He is waiting for specifications from the Engineering Department.

Mr. Holly said, he had costs on the "EI" type laminations.

Mr. Harris stated that the Chicago Transformer Company can supply us with complete transformers with "EI" type laminations.

February 25th.

13. LEGAL INVESTIGATIONS

Mr. Hardy was given a complete dial mechanism and was asked by Mr. Harris to look into the patent situation and also to see if any of the parts were patentable.

14. TWELVE SAMPLE SETS WITH DIALS

Mr. Harris thinks that the twelve sets with sample dials should be omitted so that he can concentrate on the fifty sets to be built for tests. He stated however, that there would be a total of sixty two sets built with the materials obtained for the construction of sample sets.

15. PARTS FOR FIFTY SETS

Mr. Haker stated, all parts needed for sample sets were not available. He requested that definite dates be set on which delivery of parts will be made.

It was stated that parts needed for the fifty sets would be available when assembly work was begun. Some parts will be made in the Works to avoid a holdup and take care of any emergency that arises.

16. TWENTY FIVE CYCLE FILTER CHOKE CAN

Mr. Harris requested an opinion on the use of a larger can for the twenty five cycle filter choke coil. If the power pack bases are available this type of can will be used. The object being to use up stock on hand and effect a saving of approximately \$108.50.

Mr. Haker will see if the power pack bases are available. If so, Mr. Harris will issue a change notice.

The Service Department will issue a bulletin covering the change should it be made.

There being no further business to come before the committee, the meeting adjourned.

The next meeting will be held in the Music Room Tuesday March 4th at 10 A. M.

E. Trautwein, Secretary.

Copies to: Messrs:

Chas. Edison
T. M. Edison
R. H. Allen
A. L. Walsh
A. A. Manchester
C. T. Jacobs
P. J. McGee
G. C. Harris
W. O. Olson
G. O. Cosden

F. F. Holly
J. Holle
A. J. Rhaines
W. B. Arrowsmith
C. S. Williams
E. M. Richards
W. Hildebrand
W. W. Cowan
R. Burns
E. W. Haker

W. Hardy
J. F. McCarthy
E. Trautwein

February 25th, 1930.

REPORTS TO BE MADE AT THE NEXT RADIO COMMITTEE MEETING

TO:	Paragraph #	Subject
Mr. Harris	1	Underwriters' Approval of phonograph guards
Mr. Rhaines	4	Inspection Charts
Mr. McGee	5	Service Charts
Mr. Harris	6	Bill of Materials
Mr. Harris } Mr. McGee }	8	Arm and Mounting for Switch
Mr. Harris	9	Cans for Filter Condenser and Ballast
Mr. Harris	11	Engineering Change Notices
Mr. Holly (Costs)	12	"B" Type Laminations
Mr. Hardy	13	Legal Investigations
Mr. Harris) Mr. Olson) Mr. Haker } Mr. Cowan }	15	Parts for Fifty Sets
Mr. Harris) Mr. Haker }	16	Twenty five Cycle Filter Choke Can

Taken from the minutes of the February 25th meeting.

Music Room
Building 21
Tuesday
March 4, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. R. Burns, A. A. Manchester, G. C. Harris, W. O. Olson, J. F. McCarthy, F. F. Holly, J. Holle, W. W. Cowan, A. J. Rhaines, E. W. Haker, W. B. Arrowsmith, W. A. Hardy, and E. M. Richards.

Minutes of the meeting of February 25 were approved as issued.

1. UNDERWRITERS' APPROVAL

Mr. Harris stated that final approval had been given to all parts for the radio sets.

2. GRID LEAKS

Mr. McCarthy stated that of 1300 grid leaks recently received only 12 rejections were found on incoming inspection.

3. INSPECTION CHARTS

Mr. Rhaines presented an inspection chart showing that the percentage of O.K. sets now going through was 46%, an increase of 6% over previous records.

Mr. Rhaines submitted a report in which he stated that of a total quantity of 107 power transformers returned, six were found to be O.K. in all respects. The report is on file.

4. SERVICE CHARTS

Mr. Arrowsmith stated that during the past week the following parts were shipped:

LOM Contact Barrels	227
Volume Controls	465

Mr. Holly stated that the prices for replacement parts for our present set in some cases have substantially increased on account of the small quantities being ordered.

5. BILL OF MATERIALS

Tools and parts released have not yet been ordered.

Mr. Manchester has obtained Mr. Walsh's approval to order tools. Messrs. Harris, Cowan, McCarthy and Haker will get together this afternoon to settle any questions that come up with regard to the tools and Mr. Haker will place orders with the Purchasing Department at once so they can go ahead.

March 4, 1930.

Splitdorf Electrical Company asked that we change the dimensions of the cans for filter condenser and ballast to suit their conditions. The committee felt that this could not be done because it would necessitate changes in the chassis base.

6. ARM AND MOUNTING FOR SWITCH

The general design has been approved. Mr. Harris stated a satisfactory switch with minimum throw would be supplied for the design.

7. ENGINEERING CHANGE NOTICES

- R-259 Specifying Back Panel on R-5 D.C. sets. Cost will be supplied later.
- R-260 Specifying Phonograph Motor Terminal Guard has been added to the Phonograph Motor Board Assembly to meet Underwriters' requirements. Cost \$.02 ea. (Not including cost of tools.)
- R-261 Filter Choke Assembly Authorizing use of large cans on 8-P Power Unit #34241. Saving of \$108.50 due to surplus material on hand.
- R-262 Volume Control (Centralab) - Revised, incorporating cardboard spacer and new Aguta Wood shoe. Change Letter "B". No cost.

8. POWER TRANSFORMERS

Mr. Harris stated that only two manufacturers, Polymet Manufacturing Company and Easton Coil Company, could make the coils according to present specifications on account of space requirements. Mr. Harris is revising the design so that we can be sure to have more than one reliable source of supply for our new production.

Mr. Lanchester stated that, other things being equal, he would prefer to have the coils and laminations come in separately and assemble them in our plant.

Mr. Harris and Mr. Holly will present costs and further information on power transformers at the Friday meeting, Mar. 7.

9. BASE FOR POWER PACK

The base for the power pack has not yet been released. This question will be taken up this afternoon by Messrs. Harris, McCarthy, Cowan and Baker.

10. LEGAL INVESTIGATIONS

Mr. Hardy stated that the dial mechanism had been turned over to Mr. Norton for investigation. Mr. Harris will turn over blue print of assembly to Mr. Hardy tomorrow.

March 4, 1930.

Mr. Hardy will report at the next meeting on the patent situation in regard to push on type knobs.

11. REPORT ON FIFTY SETS

Mr. Cowan stated specifications for R.F. coils had not yet been received. Everything else was O.K.

Mr. Olson stated ten chassis frames are now ready and will be turned over to the Production Department this afternoon.

12. MAIN LINE CORD PLUG

Mr. Arrowsmith was asked to investigate whether it was desirable to send the female screw plug with the new sets. He was also asked to find out if this type of plug was being sent out with the toaster and Ediphone, and if other radio companies were supplying it with their sets.

There being no further business to come before the committee, the meeting adjourned.

E. Trautwein, Secretary.

G.

Copies to: Messrs. Chas. Edison F. F. Holly W. Hardy
 T.M. Edison J. Holle J. F. McCarthey
 R. H. Allen A. J. Rhaines E. Trautwein
 A. L. Walsh W. B. Arrowsmith
 A. A. Manchester C. S. Williams
 O. T. Jacobs E. M. Richards
 P. J. McGee W. Hildebrand
 G. C. Harris W. W. Cowan
 W. O. Olson R. Burns
 G. C. Cosden ✓ E. W. Haker

March 4, 1930.

REPORT TO BE MADE AT THE NEXT RADIO COMMITTEE MEETING

	<u>Paragraph</u>	
Mr. Rhaines	3	Inspection Charts
Mr. McGee	4	Service Charts
Mr. Harris	5	Bill of Materials
Mr. Harris	7	Engineering Change Notices
Mr. Harris } Mr. Holly }	8	Power Transformers
Mr. Hardy	10	Push on Knob
Mr. Arrowsmith	12	Main Line Cord Plug

Taken from the minutes of the March 4th meeting.

Music Room
Building 21
Tuesday
March 11, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. R. Burns, G. C. Harris, W. O. Olson, F. F. Holly, J. Holle, A. J. Rhaines, E. W. Haker, W. A. Hardy and E. Trautwein.

Minutes of the meeting of March 4 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines stated he would submit inspection charts every two weeks as it takes approximately two weeks to make 1,000 sets.

The Production Department is maintaining certain standards which have been set down and the average is above those standards.

2. SERVICE CHARTS

Mr. Trautwein stated that during the past week the following shipments were made:

Jensen Speaker Heads	124
A. C. Switches	242

3. BILL OF MATERIALS

The only tool ordered so far for the 1930 production is the die cast for the dial. Requisitions for tools for the 1930 chassis were sent to the Purchasing Department on March 8. These requisitions have not yet been placed. Referred to Mr. Clark and Committee on purchasing policy.

No parts have been ordered for 1930 production yet.

Splitdorf Radio Corporation has not yet received an order from the Sales Department for the first 5000 sets. Referred to Mr. Walsh.

4. ENGINEERING CHANGE NOTICES

R-263 "C" Battery Clamp used on R5 D.C. sets - To provide a mounting for the "C" Battery. Cost 4¢ each.

Mr. Harris asked about attaching the clamp for the "C" battery to the D.C. sets. It was decided that these clamps would be sent to the Blackman Distributing Company in New York City by the Service Department as all the D.C. sets had been shipped to them.

In case of future production of D.C. sets, it was decided that the "C" battery clamp would be attached here.

March 11, 1930.

5. BASE FOR POWER PACK

The base for the power pack has not yet been released. Mr. Harris stated it would probably be released before Friday, March 14.

6. LEGAL INVESTIGATIONS

Nothing further to report on the dial mechanism at this time.

Push On Knob: Mr. Hardy has taken care of this in a memorandum to Mr. Theodore Edison, Mr. Richards and Mr. Holly.

Mr. Hardy stated that it would be necessary to have a notice of the Matzner Patent on all Light-o-Matic sets going out, and he will send a memorandum to Mr. Harris to this effect.

7. REPORT ON FIFTY SETS

It is expected that we will start sub-assemblies on the 50 sets by the end of this week. Mr. Holly stated that all material now on order for the 50 sets will probably be here by next Monday.

8. COST DATA

In the minutes of December 23, Mr. Edison asked for cost data on present production at least once a month. Referred to Mr. Manchester for latest costs.

There being no further business to come before the committee, the meeting adjourned.

E. Trautwein, Secretary.

G.

Copies to:	Messrs. Chas. Edison	F. F. Holly	W. Hardy
	T. M. Edison	J. Holle	J. F. McCarthy
	R. H. Allen	A. J. Rhaines	E. Trautwein
	A. L. Walsh	W. B. Arrowsmith	A. J. Clark
	A. A. Manchester	C. S. Williams	
	G. T. Jacobs	E. M. Richards	
	P. J. McGee	W. Hildebrand	
	G. C. Harris	W. W. Cowan	
	W. O. Olson	E. W. Haker	
	G. C. Cosden	R. Burns	

March 11, 1930

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. McGee	Paragraph 3	Service Charts
Mr. Harris	" 4	Engineering Change Notices
Mr. Manchester	" 8	Cost Data

Taken from the minutes of March 11 meeting.

Music Room
Building 21
Tuesday
March 18, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, R. Burns, A. L. Walsh, A. A. Manchester, G. T. Jacobs, P. J. McGee, G. C. Harris, W. O. Olson, A. J. Clark, F. F. Holly, J. Holle, W. W. Cowan, E. W. Baker, W. B. Arrowsmith, E. M. Richards, W. R. Kurtze, and J. F. McCarthy.

Minutes of the meeting of March 11 were approved as issued.

1. INSPECTION CHARTS

Mr. Kurtze stated that 55.8% of all sets going through the lines passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee reported 45 speaker heads were shipped during the past week.

3. BILL OF MATERIALS

Mr. Cowan stated that the bill of materials is practically all complete and is now being broken down into parts for sub-assemblies.

4. ENGINEERING CHANGE NOTICES

R-284 Part No. 200278, Patent Number Label, added to all "Light-O-Matic" models, to comply with Mr. Hardy's memorandum of March 11, 1930 to Mr. Harris. Cost - \$3.00 for balance of production (8000 sets.)

R-265 Part No. 200212, Volume Control (Centralab), has been revised, omitting the cardboard spacer between sections on production of controls with the Aguta wood shoes.

5. BASE FOR POWER PACK

Mr. Harris stated that the base for the power pack will be released tomorrow.

6. LEGAL INVESTIGATIONS

No report on the dial mechanism to date.

7. REPORT ON FIFTY SETS

Mr. Cowan stated that sub-assemblies for the fifty sets will start as soon as solder lugs are received. Tools for the solder lugs are now being made.

March 18, 1930

- 2 -

8. CABINETS

No order has yet been placed for cabinets. Mr. Walsh stated that two were coming from Silver Lake today for criticism and one of these will probably be satisfactory.

9. TUNING KNOB

Different sizes of tuning knobs were considered but no decision was reached. Referred to Mr. Walsh for further consideration.

10. ESCUTCHEON PLATE

Mr. Richards stated that the design for the escutcheon plate is still under consideration.

11. 1930 SET

Mr. Jacobs stated that the 1930 set is now ready for final approval. The committee will listen to this set this afternoon in the sound-proof room in Building 25.

12. PRODUCTION MATERIAL

Mr. Manchester stated that production on the 1930 set may be held up if a final decision is not reached soon on the speaker and gang condenser.

Six Utah speakers are being shipped from Chicago today. As soon as they are received a final decision will be made on the type of speaker to be used with the 1930 set.

The gang condenser is being held up on account of legal difficulties. It is expected that a final decision will be made on the gang condenser by Saturday, March 22.

13. PURCHASING POLICY

Several orders for tools are in the Purchasing Department and have not yet been placed. Mr. Clark stated that all of these orders would be placed this week.

Mr. Edison suggested that a summary of all orders that have been placed to date be brought to each meeting.

14. TONE FOR THE 1929 SET

Mr. Walsh asked if it were possible that the 1929 set be given better tone. Mr. Harris will take three Light-O-Matics and make certain changes in two of them to bring out the bass notes as requested by Mr. Walsh, for comparative purposes.

March 18, 1930.

There being no further business to come before the committee,
the meeting adjourned.

R. Burns

G

Copies to: Messrs. Chas. Edison F. F. Holly A. J. Clark
T. M. Edison J. Kelle W. A. Hardy
R. H. Allen A. J. Rhaines J. F. McCarthy
A. L. Welsh W. B. Arrowsmith E. Trautwein
A. A. Manchester C. S. Williams
C. T. Jacobs E. M. Richards
P. J. McGee W. Hildebrand
G. C. Harris W. W. Cowan
W. O. Olson E. W. Baker
G. C. Cosden R. Burns

March 18, 1930.

- 4 -

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Harris	" 4	Engineering Change Notices
Mr. Holly	" 13	Purchasing Policy - Summary of Orders Placed

Taken from the minutes of meeting held March 18.

Building 21
Tuesday
March 25, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, R. Burns, A. A. Manchester, C. T. Jacobs, P. J. McGee, W. O. Olson, F. F. Holly, J. Holle, W. W. Cowan, E. W. Haker, W. B. Arrowsmith, E. M. Richards, A. J. Rhaines and J. F. McCarthey.

Minutes of the meeting of March 18 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported the following:

On the 744000 series, 55.4% of these sets passed all tests satisfactorily. Last week a total of 59.5% of all sets going through the lines passed all tests satisfactorily. Of the first 498 sets of the 745000 series, 65.4% passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee reported as follows:

Volume controls shipped to date	9580
Speaker heads " " "	2239
LOM Contact Assemblies " "	2886

3. BILL OF MATERIALS FOR NEW MODEL

Mr. Cowan stated that a complete bill of materials is now available.

4. ENGINEERING CHANGE NOTICES - None.

5. BASE FOR POWER PACK

This has not yet been released on account of additional holes to be added. Mr. Olson will supply latest print and Mr. Haker will place order with the Purchasing Department today for tools.

No specifications are yet available for the tone control. They will probably be ready tomorrow.

6. LEGAL INVESTIGATIONS

No report on the dial mechanism to date.

7. REPORT ON FIFTY SETS

It was decided to order solder lugs at once so that sub-assemblies can be made up on the fifty sets.

Decisions were made on the following parts:

Speaker terminal board	-	Will be released today
Local-Distance Switch	-	" " "
Phono switch	-	Mr. Holly will procure samples at once
Tone control	-	Will probably be released today
Filter for tone control	-	" " " " to-morrow

8. CABINETS

No order has yet been placed for cabinets.

9. TUNING KNOBS

Sizes of tuning knobs for 1930 production referred to Mr. Walsh and Mr. Richards.

10. ESCUTCHEON PLATE

Additional sketches of the escutcheon plate have arrived. Mr. Olson is making final lay out for escutcheon plate. This question will probably be decided before the next meeting.

11. 1930 SET

Mr. Jacobs is making up about ten complete 1930 sets with regular parts including dial, gang condenser, speaker, etc. The Production Engineering Department will supply Mr. Jacobs with whatever parts he needs to build these sets.

12. PRODUCTION MATERIAL

The Radio Condenser Company of Camden will supply the gang condensers for 1930 production.

13. SPEAKERS

A sub-committee consisting of Messrs. Jacobs, McGee, Harris Olson, Manchester, Cowan, McCarthey, and Rhaines, was appointed to criticize the new Jensen speaker now in Mr. Harris' department and report if any changes are to be made.

This sub-committee will also report as to what disposition will be made of the 1300 Jensen speakers now in stock.

The committee decided that six standard speakers should be available in the different departments for purposes of comparison with future production.

14. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum on the orders which have been placed from March 21 to March 24, Inclusive. This report is on file.

15. TONE FOR 1929 SET

No report is available at this time. Referred to Mr. Harris and Mr. Jacobs.

16. SOLDER LUGS

Mr. Olson submitted samples of solder lugs for power transformer. The committee will decide which type should be used for production after the first fifty sets are made up.

17. FINISH

The Committee on Finish will meet this afternoon and make a report at the next meeting on the finish of all the parts for the 1930 chassis and power pack.

18. STATION WNJ

Mr. McCarthy reported that Station WNJ was broadcasting some unfavorable publicity regarding Edison Radio Sets. Messrs. Manchester, McGee, Holle, McCarthy and Rhaines will investigate this matter and report.

There being no further business to come before the committee, the meeting adjourned.

R. Burns

G.

Copies to: Messrs. Chas. Edison F. F. Holly A. J. Clark
 T. M. Edison J. Holle W. A. Hardy
 R. H. Allen A. J. Rhaines J. F. McCarthy
 A. L. Walsh W. B. Arrowsmith E. Trautwein
 A. A. Manchester C. S. Williams
 G. T. Jacobs E. M. Richards
 P. J. McGee W. Hildebrand
 G. G. Harris W. W. Cowan
 W. O. Olson E. W. Haker
 G. C. Cosden ✓ R. Burns

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Harris	" 4	Engineering Change Notices
Mr. Cowan	" 7	Report on Fifty Sets
Messrs. Jacobs McGee Harris Olson Manchester Cowan McCarthy Rhaines	" 13	Speakers
Mr. Holly	" 14	Additional Orders Placed
Mr. Harris Jacobs Manchester McGee Berggren Richards	" 17	Finish

Taken from the minutes of meeting held March 25.

Building 21
April 1, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, R. Burns, A. A. Manchester, C. T. Jacobs, P. J. McGee, G. C. Harris, F. F. Holly, J. Holle, W. W. Cowan, E. W. Baker, W. B. Arrowsmith, E. M. Richards, A. J. Rhaines and W. A. Hardy.

Minutes of the meeting of March 25 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported that on the 745000 series, 54.6% of all sets have passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee reported 31 25-cycle transformers were shipped during the past week. He mentioned that he had on file several complaints from jobbers and dealers where cabinets were received in a damaged condition. A committee consisting of Messrs. Richards, McGee, Manchester and Clarke was appointed to investigate and report on packing in general, and more specifically to find out the causes for damaged cabinets and the reasons why work must be done by our branches and jobbers on cabinets after they are received.

Mr. McGee was asked to find out from jobbers and dealers if they have any damaged cabinets on hand and Mr. Clarke will investigate and inspect these cabinets before they are repaired.

3. ENGINEERING CHANGE NOTICES - None

4. BASE FOR POWER PACK

The order for tools for the power pack base will be placed today.

The final design of the tone control and tone filter is not yet complete. This design is still under investigation.

5. LEGAL INVESTIGATIONS

Mr. Hardy reported that Mr. Norton wants more information on the dial mechanism. Referred to Mr. Harris.

6. REPORT ON FIFTY SETS

Solder lugs have been received and are now in the General Manufacturing Division being tin dipped. They will be turned over to Splitdorf Radio Corporation this afternoon.

Mr. Harris stated that all the chassis bases for the 50 sets have been turned over to Splitdorf Radio Corporation. The power pack bases are now under construction.

Mr. Jacobs will turn over a complete set to Mr. McGee on Thursday.

April 1, 1930.

April 3, which will be used by him in different locations to determine the performance of the set.

7. CABINETS

A formal order for cabinets has not yet been placed.

The designation of the new sets will be the R-6, R-7, and C-5.

8. TUNING KNOBS

Mr. Richards stated that a final drawing is now ready on tuning knobs. Size of the set screws is referred to Mr. McCarthy. The four knobs on the 1930 set will all be the same size.

9. ESCUTCHEON PLATE

Mr. Richards reported that the final lay out for the escutcheon plate is now complete and has been sent to the manufacturer for price.

10. 1930 SET

Mr. Jacobs stated that he had four sets which are now almost completed.

11. SPEAKERS

An order has been placed by the Production Department for 3700 new Jensen speakers. Referred to Mr. Walsh.

The 1300 Jensen speakers now in stock will be reworked, no charge, by Jensen Manufacturing Company to suit our conditions.

12. ADDITIONAL ORDERS PLACED

Mr. Holly presented a list of production orders placed between March 27 and March 31, inclusive. This report is on file.

13. TONE FOR THE 1929 SET

The tone of the 1929 set is being considered in conjunction with the tone for the 1930 set. Referred to Messrs. Harris and Jacobs for immediate action.

14. STATION WNJ

Mr. Manchester stated he listened to Station WNJ recently for 45 minutes and did not hear any unfavorable publicity regarding Edison radio sets.

April 1, 1930.

15. PRODUCTION MATERIAL

Mr. Holly asked that he be supplied with specifications for wire and line cords as soon as possible so that he can get quotations. Referred to Mr. Cowan.

Mr. Richards stated that the General Manufacturing Division have 4000 baffle boards which they would like to sell. It was decided that a full sized baffle board would be used on the R-6. At a later date, if a cheaper set is manufactured, the 4000 baffle boards referred to can be used.

Mr. Holly stated that he did not have complete specifications and drawings on several of the parts for the 1930 set. Messrs. Holly, Cowan, Haker, and Burns will get together today to go over a complete list of parts to see that the Purchasing Department have all specifications and drawings that are available.

There being no further business to come before the committee, the meeting adjourned.

R. Burns.

G.

Copies to: Messrs. Chas. Edison
T. M. Edison
R. H. Allen
A. L. Walsh
A. A. Manchester
C. T. Jacobs
P. J. McGee
G. C. Harris
W. O. Olson
G. C. Cosden ✓

F. F. Holly
J. Holle
A. J. Rhaines
W. B. Arrowsmith
C. S. Williams
E. M. Richards
W. Hildebrand
W. W. Cowan
E. W. Haker
R. Burns

A. J. Clark
W. A. Hardy
J. F. McCarthey
E. Trautwein

April 1, 1930.

- 4 -

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Harris	" 3	Engineering Change Notices
Mr. Cowan	" 6	Report on Fifty Sets
Mr. Holly	" 12	Additional Orders Placed

Taken from the minutes of meeting held April 1.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, R. Burns, A. A. Manchester, C. T. Jacobs, P. J. McGee, G. C. Harris, W. O. Olson, F. F. Holly, J. Holle, W. W. Cowan, W. B. Arrowsmith, E. M. Richards, A. J. Rhaines, J. F. McCarthy, and W. A. Hardy.

Minutes of the meeting of April 1 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported that on the first 681 sets of the 746000 series, 58.7% have passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee stated that the total number of speaker heads that had been shipped to date was 1,717 instead of 2,239 previously reported.

He also reported that 25 sets had been taken from stock at Silver Lake and it was found that some of the cabinets had been damaged even before being shipped out. Mr. Richards is arranging to have a strip placed on the inside of the shooks to prevent the top ledge of the cabinets from being damaged. It was decided that 25 more sets will be removed from shooks at Silver Lake and inspected, and if the cabinets are found in a damaged condition it is quite probable that all the sets now in stock will be removed and repacked in shooks which have been altered to protect the cabinets from damage in shipment.

Mr. Edison suggested that in packing sets, the lid should not be completely fastened until they are going to be shipped so that in case it becomes necessary to open up the shook again for some reason the lid can easily be removed.

3. ENGINEERING CHANGE NOTICES - None

4. POWER PACK

The design of the tone control and tone filter is not yet released. Referred to Mr. Jacobs.

5. LEGAL INVESTIGATIONS

The question came up about chassis being sold separately. It was decided that approval should be obtained from R.C.A. before any chassis are sold. Referred to Mr. Hardy.

6. REPORT ON FIFTY SETS

Mr. Harris stated that 35 power pack bases are now ready to be turned over to the Production Department.

All the material for the 50 sets will probably be in by next Saturday, April 12. It is expected that at least 25 of these sets will be completed by April 19.

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The first 1930 set will be turned over to Mr. McGee today for the purpose of finishing up the questionnaire.

Mr. Richards stated that the dial panels for the first 50 sets will be available next week.

7. CABINETS

A second radio cabinet will probably be ordered today. Referred to Mr. Richards and Mr. Walsh.

The cabinets for 1930 production will have removable grills.

8. TUNING KNOBS

The design of the tuning knobs has been approved and the Purchasing Department is now awaiting bids before placing the order.

9. ESCUTCHEON PLATE

Mr. Richards has turned over samples of the escutcheon plate for the 1930 set to Mr. Walsh for his approval. No escutcheon plates have been ordered yet. Referred to Mr. Walsh.

10. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum of orders placed on April 4 to April 7, inclusive. This memo is on file.

11. DESIGN CHANGES

Mr. Jacobs asked that we seriously consider a change in the size of the tube shields for the 1930 set in order to make the compensator screws on the variable condenser more accessible. It was decided no change would be made on the first 5,000 sets so that production would not be held up on May 15. The following committee will investigate and report: Messrs. Manchester, McGee, Harris, and Jacobs.

12. ITEMS LIKELY TO TIE UP PRODUCTION ON MAY 15

The only material that will not be available on May 15 for production will be cabinets. Mr. Richards stated that both types of cabinets would be available for the June Show. Referred to Mr. Walsh.

13. TOPE FOR THE 1929 SET

No report to date. This is being considered in conjunction with the tone for the 1930 set. Referred to Messrs. Harris and Jacobs for further study.

April 8, 1930

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14. PRODUCTION MATERIAL

The following items were considered:

Mystery boxes - Order will be placed today
R. F. Coils - No specifications available until some of the
50 sets are completed
Resistors - Held up for completion of 50 sets
Wire - Specifications are now being completed
Baffle board - Drawing now being made
3 Prong Connect-
ing Plug - Held up until some of the 50 sets are completed
Fuse Box Cover - This item will be furnished by the General
Manufacturing Division complete with printing.

15. LICENSE NOTICE

Mr. Harris, Mr. Jacobs, and Mr. Hardy will get together and write the license notice for the 1930 set.

16. POWER UNIT CAN

It was decided that holes will be placed in the power unit can as suggested by Mr. Walsh. Referred to Mr. Harris and Mr. Olson.

There being no further business to come before the committee, the meeting adjourned.

R. Burns

G.

Copies to: Messrs. Chas. Edison F. F. Holly A. J. Clark
T. M. Edison J. Holle H. A. Hardy
R. H. Allen A. J. Rhaines J. F. McCarthy
A. L. Walsh W. B. Arrowsmith E. Trautwein.
A. A. Manchester C. S. Williams
G. T. Jacobs E. M. Richards
P. J. McGee W. Hildebrand
G. C. Harris W. W. Cowan
W. O. Olson E. W. Baker
G. C. Cosden ✓ R. Burns

April 8, 1930

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REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Harris	" 3	Engineering Change Notices
Mr. Cowan	" 6	Report on Fifty Sets
Mr. Holly	" 10	Additional Orders Placed

Taken from the minutes of meeting held April 8.

Building 21
April 15, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. R. Burns, A. A. Manchester, G. C. Harris, P. J. McGee, C. J. Hirsch, F. F. Holly, J. Holle, W. W. Cowan, W. B. Arrowsmith, E. M. Richards, E. W. Haker, A. J. Rhaines, and J. F. McCarthey.

Minutes of the meeting of April 8 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported that on the 746000 series, 58.6% have passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee stated that cabinets are now being removed from shocks at Silver Lake to be inspected. He will furnish a report on this item at the next meeting.

3. POWER PACK

A committee composed of Messrs. Harris, McGee, Hirsch, Cowan, and Arrowsmith, was appointed to follow up the design of the tone control and tone filter and report so that specifications on these items may be completed as soon as possible.

4. LEGAL INVESTIGATIONS

No report available on the dial mechanism. Referred to Mr. Hardy.

5. REPORT ON FIFTY SETS

Mr. McGee is submitting a separate report on the field tests made at Williamsport, Pa. on Saturday and Sunday.

Mr. McGee asked for another set to be sent to the West Coast to the San Francisco branch office for field tests. Splitdorf Radio Corporation will turn over to Mr. McGee a complete chassis and power pack, installed in a cabinet ready for shipment, on next Monday, April 21.

It was decided that the new set would be in a cabinet and shipped in one of the latest type shocks so that a test could be made on the method of packing also with this set. It is planned to have the set returned so that it may be examined. Referred to Mr. Walsh for his approval.

6. TUNING KNOBS

The tuning knobs for the 1930 set will probably be ordered today.

April 15, 1930

7. ESCUTCHEON PLATE

In case the new type of escutcheon plate is not available for the fifty sets now under construction, it is planned to use some of last year's escutcheon plates. Mr. Holly stated that we will probably receive the first delivery of the new escutcheon plates on April 24.

8. DIAL PANELS

The dial panels for the 1930 set will be shipped tomorrow.

9. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum of orders placed from April 11 to April 14, inclusive. This memorandum is on file.

10. DESIGN CHANGES

Mr. Hirsch stated that the design of the R. F. coil is subject to revision. The Research Engineering Department plan to furnish a final design by Friday, April 18. Referred to Mr. Hirsch.

11. ITEMS LIKELY TO TIE UP PRODUCTION

The following items are likely to tie up production unless specifications are made available at once:

R. F. Coils	6 Prong Connector
Resistors	Shielded cable
Tone control	

12. PRODUCTION MATERIAL

R. F. Coils - Final specifications will probably be available Apr. 18.
Resistors - Color code now available. Specifications will be available tomorrow.
Wire - Specifications will be available today
Baffle Board - Drawing not yet complete. Referred to Mr. Richard
6 Prong Plug - Still held up. Referred to committee on this item
Phono switch - Purchasing Department is now receiving quotations on this item. It was decided that the phono switch would not be used on the first 50 sets.

13. tone control for 1929 set

Mr. Harris stated that he had nothing further to report on this at the present time.

14. VOLUME CONTROL FOR 1929 SET

Mr. McGee stated that he is planning on replacing all wire wound volume controls on the 1929 sets. Splitdorf Radio Corporation will supply the Service Department with new volume controls to replace the old ones.

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15. DIAMOND POINT NEEDLE FOR LATERAL RECORDS - C-4

Mr. McGee stated that he had received different requests asking for diamond point needles to play lateral cut records. Mr. Harris stated that he did not think the diamond point needle could be made to give satisfactory results with lateral cut records.

16. ASSEMBLY DRAWINGS FOR 1930 SET

Mr. Holle asked that assembly drawings for the 1930 set be turned over to the Production Department as soon as possible. Wiring diagram is badly needed at present. Referred to Mr. Harris.

There being no further business to come before the committee, the meeting adjourned.

R. Burns

G.

Copies to: Messrs. Chas. Edison
T. M. Edison
R. H. Allen
A. L. Walsh
A. A. Manchester
C. T. Jacobs
P. J. McGee
G. C. Harris
W. O. Olson
G. C. Cosden ✓

F. F. Holly
J. Holle
A. J. Rhaines
W. B. Arrowsmith
C. S. Williams
E. A. Richards
W. Hildebrand
W. W. Cowan
E. W. Haker
R. Burns

A. J. Clark
W. A. Hardy
J. F. McCarthy
E. Trautwein
G. J. Hirsch

April 15, 1930

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REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service Charts
Messrs. Harris McGee Hirsch Cowan Arrowsmith	" 3	Power Pack- Tone Control
Mr. Cowan	" 5	Report on 50 sets
Mr. Holly	" 9	Additional Orders Placed

Taken from the minutes of meeting held April 15.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. R. Burns, T. L. Edison, A. A. Manchester, G. C. Harris, W. O. Olson, P. J. McGee, C. J. Hirsch, F. F. Holly, W. B. Arrowsmith, E. M. Richards, E. W. Baker, A. J. Rhaines, J. F. McCarthy, and W. A. Hardy.

Minutes of the meeting of April 15 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported that on the 747000 series, 58.2% have passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee stated that five more cabinets have been removed from shocks at Silver Lake and are now awaiting his inspection.

3. POWER PACK

The tone control design has been completed. Specifications and drawings will be released today.

Connecting plug - It was decided to order 1000 Eby connecting plugs and sockets today.

4. LEGAL INVESTIGATIONS

Dial Mechanism - Mr. Hardy stated that there are three major patents to consider in connection with the dial mechanism.

Mr. Hardy will see Mr. Walsh in regard to obtaining permission from R.C.A. to sell radio chassis separately and report.

5. REPORT ON FIFTY SETS

Twelve sets have now been completed and are being tested. The completed sets and cabinets are to be moved to the Customer's Repair Department, 5th floor, 24 Building, where these sets will be given a life test. After they have passed all tests satisfactorily, the sets will be distributed as follows:

- 1 to Mr. Harris who will make bump test
- 3 " Mr. McGee for the West Coast (extra filter condensers will be shipped with these sets)
- 1 " Mr. Edison for field tests
- 1 " Mr. Hirsch " " "
- 1 " Mr. Walsh " " "
- 1 " Mr. Manchester " " "
- 1 " Mr. Arrowsmith " " "
- 1 " Mr. Baker " " "
- 1 " Mr. Rhaines " " "
- 1 " Mr. Lorch " " "

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These sets are being placed in different locations in the metropolitan area to determine the performance of the 1930 set.

In order to collect data on the performance of these sets, a questionnaire has been made out and each person making field tests will be supplied with a questionnaire which he will fill out and return. It is expected that these questionnaires will be returned, completely filled out, inside of three days after receipt of the radio set.

Mr. Shearman will arrange to have all sets delivered to the desired locations.

Twelve additional sets are now under construction. The disposition of these will be taken up at the Friday meeting, April 25.

6. TUNING KNOBS

Approved samples of tuning knobs have not yet been received.

7. ESCUTCHEON PLATES

Mr. Holly will get in touch with the manufacturers to find out when we will receive our first shipment of escutcheon plates.

It is the desire of the committee that new escutcheon plates be used on the first 50 models if possible.

8. DIAL PANELS

The dial panels for the first fifty sets have arrived.

9. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum of orders placed from April 18 to April 21, inclusive. This memorandum is on file.

10. DESIGN CHANGES

Mr. Hirsch stated that the only design change he knew of at the present time was in the R.F. coils. This change will not affect the first 1000 sets.

11. ITEMS LIKELY TO TIE UP PRODUCTION

R.F. Coils - An order has been placed for the 1st, 2nd, and 3rd R.F. Coils. Specifications for the 4th and 5th R.F. coils will be available today and an order will be placed with the Purchasing Department for these tomorrow.

Resistors - Orders for resistors have been placed. Mr. McGee stated he did not favor using Durham resistors. A committee composed of Messrs. Harris, McGee and Rhaines will make tests on sample resistors before resistors for production are shipped to us.

Shielded cable:- Mr. Holly is now securing bids on this item.

Push-pull Transformer - Mr. Harris stated that tests are now being made on the push-pull transformer and specifications and drawings will probably be released today. Referred to Messrs. Baker and Holly.

Wire - A sub-committee composed of Messrs. Harris, J. Holle, F. F. Holly, Olson, Rhaines and Cowan was appointed to be responsible for the specifications for wire for the 1930 set. This sub-committee will meet this afternoon so that specifications can be released at once.

12. LICENSE NOTICE

A sub-committee composed of Messrs. Hardy, Harris, and Hirsch will be responsible for the license notice.

13. SCHEMATIC DIAGRAM

Mr. Harris suggested that a print of the wiring diagram be attached to each of the 1930 sets. Mr. Edison suggested that this diagram be pasted on the shelf underneath the chassis. This item will come up for further discussion at the next meeting. Referred to Messrs. Walsh and McGee for consideration.

14. PARTS WHICH GAVE TROUBLE WITH 1929 SET

The following items gave trouble with the 1929 set and were considered to find out if they were likely to give trouble with the 1930 set:

Volume control - Mr. Hirsch stated that he did not anticipate any trouble with the volume control in the 1930 set on account of the design of the set.

Power transformer - Mr. Harris stated that he believed the power transformer would not give us any trouble this year.

Speaker heads - Mr. Harris will make breakdown tests and also will make temperature tests on voice coils of speakers.

Dial mechanism and L-O-M contacts - Mr. Edison suggested that further tests be made on the dial mechanism and L-O-M contacts to find out if we were likely to experience any difficulty with this item on the 1930 set. Mr. Harris stated that he had run a life test on one dial mechanism and that it had operated 203,091 times before breaking down.

A. C. Line switches - It is planned to use the H. & H. line switches on the 1930 set as these same switches are now performing satisfactorily on the 1929 set.

Audio transformers - There is only one audio transformer on the 1930 set as compared with two on the 1929 set. Mr. Harris stated that he could foresee no trouble with the audio transformer in the 1930 set as now designed.

April 22, 1930

R.F. coils - Mr. McGee stated that up to April 1 we had shipped 55 complete sets of coils for the 1929 set. The design of the 4th and 5th R.F. coils in the 1930 set is now under consideration.

15. PICK UP FOR 1930 SET

It was decided that the coupling transformer necessary with the pick up for the 1930 combination set would not be used on the 1930 radio set.

Mr. Harris is now working on the design for the 1930 combination set.

16. UNDERWRITERS APPROVAL

Mr. Harris will send one of the 1930 radio sets to the Underwriters Laboratories for approval as soon as a complete set installed in cabinet is available.

17. CALIBRATION OF THE DIAL SCALE

The 12 sets now available will be used for the calibration of the dial scale. Referred to Messrs. Harris and Hirsch.

18. QUESTIONNAIRE

Mr. McGee has 12 complete sets of questions ready to go out with the 12 1930 sets now under construction.

19. DIMENSIONS OF PACKING CASES FOR 1930 SET

The dimensions of the packing cases for the 1930 sets are as follows:

R-6	52 1/2" high	39" wide	21 3/4" deep
R-7	51" high	31 3/4" wide	20 1/4" deep

These are overall outside dimensions.

There being no further business to come before the committee, the meeting adjourned.

R. Burns

G.

Copies to: Messrs.	Chas. Edison	F. F. Holly	A. J. Clark
	T. M. Edison	J. Holle	W. A. Hardy
	R. H. Allen	A. J. Rhaines	J. F. McCarthy
	A. L. Walsh	W. B. Arrowsmith	E. Trautwein
	A. A. Manchester	C. S. Williams	F. J. Hirsch
	C. T. Jacobs	E. M. Richards	
	P. J. McGee	W. Hildebrand	
	G. C. Harris	W. W. Cowan	
	W. O. Olson	E. W. Haker	
	G. C. Cosden	R. Burns	

April 23, 1930

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REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Cowan	" 5	Report on Fifty Sets
Mr. Holly	" 9	Additional Orders Placed

Taken from the minutes of meeting held April 23.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. R. Burns, T. M. Edison, A. A. Manchester, G. T. Jacobs, G. C. Harris, W. O. Olson, P. J. McGee, C. J. Hirsch, F. F. Holly, J. Holle, W. B. Arrowsmith, E. M. Richards, E. W. Maker, A. J. Rhaines, J. F. McCarthy, and W. A. Hardy.

The minutes of meeting of April 22 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported that on the 748000 series, 56.3% of the first 594 sets put through have passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. Richards reported that seven cabinets were removed from shocks at Silver Lake yesterday and only one cabinet was found to be damaged, - although the shocks had been almost completely demolished.

3. FINISH OF PRESENT PRODUCTION

Mr. Manchester stated that the present production schedule will be completed about May 12. It was decided to complete all D.C. sets for which parts are now on hand.

4. MOVE SILVER LAKE CABINET ASSEMBLY TO WEST ORANGE

The cabinet assembly now at Silver Lake will probably be moved to West Orange about May 15.

5. POWER PACK FOR 1930 SET

Mr. Harris submitted two samples of connecting plugs for the power pack. The final decision on the connecting plug is referred to the committee on this item to investigate and make report on costs and performance of the different plugs available.

6. LEGAL INVESTIGATIONS

Mr. Hardy reported that he has not yet had an official notification from Mr. Norton on the dial mechanism, but from verbal reports we should go ahead with our present mechanism.

Mr. Harris will notify the American Transformer Company, who wish to buy chassis from us, to submit a written request to Mr. Walsh to purchase some of the Edison chassis separately. Mr. Hardy will get in touch with Mr. Walsh to decide if it is desirable to sell chassis and power packs separately.

7. REPORT ON FIFTY SETS

3 1930 sets were shipped to the West Coast on April 26.

1 set was turned over to Mr. McGee on April 26 for tests in Virginia.

1 set is to be turned over to Mr. Walsh at his home for field tests, to replace the experimental set which he now has. The experimental set is to be returned to Mr. Jacobs.

1 set is to be turned over to each of the following for field tests:

Mr. Theodore M. Edison, 106 N. Walnut St., E. Orange, N.J.

Mr. G. C. Harris, 459 Heywood Ave., Orange, N.J.

Mr. C. J. Hirsch, 107 Lockwood Ave., New Rochelle, N.Y.

Mr. A. A. Manchester, 52 Watchung Ave., W. Orange, N.J.

Mr. W. H. Arrowsmith, 40 Overlook Ave., W. Orange, N. J.

Mr. E. W. Haker, 270 Harrison Ave., Jersey City, N. J.

Mr. A. J. Rhaines, 89 W. Front St., Red Bank, N.J.

Mr. Lorch - to be turned over to Mr. McGee in the Music Room

8 sets to Mr. Rhaines for the purpose of building test equipment

1 to Mr. Charles Edison

1 to Mr. R. H. Allen

3 to Mr. Harris for bump test and Underwriters Laboratories

1 to Mr. W. W. Cowan for field tests

As soon as field tests have been made on these different sets, they will be returned to the plant and shipped to different parts of the country for further tests.

8. TUNING KNOBS

Samples of tuning knobs have been received and were approved. Mr. Holly stated that tuning knobs for production will probably be here by May 7.

9. ESCUTCHEON PLATES

Escutcheon plates were shipped last night by special delivery. They will probably be here today for approval.

10. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum on additional orders placed from April 25 to April 28, inclusive. This report is on file.

11. DESIGN CHANGES

The calibration of the dial scale caused a change in the number of turns in one of the R.F. coils. Mr. Harris stated that revised drawings on this change will be put through today.

The calibration of the dial scale is now complete and drawings will be issued today.

The word "Light-O-Matic" is to be maintained and the word "Phonograph" added on the dial scale of the 1930 set.

The method of numbering the dial scale on the 1930 set is referred to the Legal Department for investigation.

12. ITEMS LIKELY TO TIE UP PRODUCTION

R.F. Coils - No promise on date of delivery. Referred to Purchasing Department.

Resistors - Samples have been received and are being tested.

Referred to committee on resistors for approval.

Shielded cable - Orders have not yet been placed. Mr. Holly stated they will probably be placed tomorrow.

Push-Full Transformer - Specifications and drawings will be completed today.

Wire - Orders for wire have been placed by the Purchasing Department.

Cabinets - No promise on the first shipment of cabinets to date. Referred to Mr. Walsh and Mr. Richards.

Tube shield base - Best promise for delivery May 15

Jan for Untuned Transformer - Best promise for delivery May 15

R.F. Coil shield clamp - Best promise for delivery May 15

13. FOLLOW UP ON MATERIAL

The responsibility for getting material here in time for production rests entirely with the Purchasing Department. The dates upon which the different items should be received at our plant have been specified on the different production requisitions. In case of any tie-up on any of the different items which are required for production, the Purchasing Department has been asked to make known those items which may not be received on time as specified on the production requisitions. Referred to Messrs. Clark and Holly.

Mr. Edison requested that all orders for the first 1,000 sets be placed at once as it is getting so close to the date to start production.

14. SCHEMATIC DIAGRAM

Mr. Harris is making up a schematic diagram which will probably be attached to the cabinet of the 1930 set. He will submit a sample at the next meeting for criticism.

15. UNDERWRITERS' APPROVAL

Mr. Harris will secure the Underwriters' approval on the 1930 set as soon as possible.

16. PLANT LAYOUT

Mr. Edison asked about the gain test booths and air test booths on the second floor of #24 Building. The contract for the steel work on these booths will probably be let today. Referred to Messrs.

April 29, 1930

- 4 -

MacLaughan, Schweitzer, and Eaton.

17. PRODUCTION MATERIAL

Mr. Holly was authorized to place an order with the Splitdorf Electrical Company for mystery boxes for the first 5,000 radio sets

Mr. Harris submitted a sample of a new type of volume control for criticism.

It was stated that the volume control switch on the 1930 set should be built so that the volume of the set can be reduced to zero. Referred to Mr. Jacobs.

Mr. Hardy, Mr. Harris, and Mr. Jacobs have been appointed as a sub-committee to be responsible for the license notice for the 1930 set.

There being no further business to come before the committee, the meeting adjourned.

R. Burns.

G.

Copies to: Messrs. Chas. Edison F. F. Holly A. J. Clark
T. M. Edison J. Holle W. A. Hardy
R. H. Allen A. J. Rhaines J. F. McCarthy
A. L. Walsh W. B. Arrowsmith E. Trautwein
A. A. Manchester C. S. Williams C. J. Hirsch
C. T. Jacobs E. M. Richards
P. J. McGee W. Hildebrand
G. C. Harris W. W. Cowan
W. O. Olson E. W. Haker
G. C. Cosden ✓ R. Burns

April 29, 1930

- 5 -

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph #1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Harris	" 5	Power pack for 1930 set - Connecting Plug
Mr. McGee		
Mr. Manchester		
Mr. Jacobs		
Mr. Holle	" 10	Additional orders placed
Mr. Holly		

Taken from the minutes of meeting held April 29.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T.M. Edison, R. Burns, A. A. Manchester, C. T. Jacobs, G. C. Harris, W. O. Olson, P. J. McGee, F. F. Holly, J. Holle, W. B. Arrowsmith, E. W. Haker, A. J. Rhaines, and W. A. Hardy.

The minutes of the meeting of April 29 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported on the first 185 sets of the 749000 series, 53.6% have passed all tests satisfactorily.

2. SERVICE CHARTS

Mr. McGee reported that 105 speaker heads were shipped last week, making a total of 2,034 speaker heads shipped to date.

3. TOBE FOR THE 1929 SET

Mr. Harris stated he was still working on this.

4. POWER PACK FOR 1930 SET

Report of committee on connecting plug is not yet available.

5. LEGAL INVESTIGATIONS

No report yet available on dial mechanism. Referred to Mr. Hardy.

No report yet on the question of selling chassis separately. Referred to Mr. Walsh.

Method of numbering dial scale - Mr. Hardy will find out if there are any patents covering the present design of our dial scale.

Mr. Hardy mentioned that there are some patents on file covering the design of a radio-phono switch similar to that being used on the 1930 set. He will report further on this at the next meeting.

6. REPORT ON FIFTY SETS

Mr. Rhaines reported that 16 sets have been completed to date and one of these has been retained as a standard in the Production Department. 11 sets are now undergoing repair and 6 are awaiting test. This makes a total of 33 to date.

Mr. Harris now has three sets and is making bump tests.

7. ESCUTCHEON PLATE

The escutcheon plates of the revised design have not yet been received. Mr. Holly reported they will probably be here in a few days.

May 8, 1930

8. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum of orders placed from May 2 to May 8, inclusive. This memorandum is on file.

9. DESIGN CHANGES AS SUGGESTED BY QUESTIONNAIRE

Five questionnaires have been returned to date. Among the suggestions offered for improvement of the 1930 Edison Radio Set are the following:

- (1) Locate tone control switch on front panel. Referred to Mr. Walsh.
- (2) Re-design connector plug and socket. Referred to Mr. Harris.
- (3) Mark knobs on front panel to indicate function of each. Referred to Mr. McGee.
- (4) Use rubber grommet where cable comes through chassis frame. Referred to Mr. Harris.
- (5) Suggest improved sensitivity above 1000 K.C. Referred to Mr. Jacobs.
- (6) Use improved method to hold compensator screws in position. Referred to committee on this item.

10. REPORT ON FOLLOW-UP OF MATERIAL

Mr. McCarthy has been assigned to the New England territory to follow up on certain items which are likely to tie up production on May 15.

Mr. Haker has been assigned to follow up on all parts from Splitdorf Electrical Company.

Mr. Haker reported that Splitdorf Electrical Company in Newark wanted approval on several different samples which they have submitted. In checking up on this, Mr. Harris claimed that the Purchasing Department had been advised that the samples had already been approved. Referred to Purchasing Department.

Mr. Wilkerson has been notified that the mail and delivery service between Orange and Newark seems to be held up for some reason as Mr. Haker reported that communications mailed in Orange on May 2nd were not delivered in Newark until May 6th.

Mr. Holly will report at future meetings on the dates of delivery of certain items which are likely to tie up production. Referred to Purchasing Department.

11. UNDERWRITERS APPROVAL

Mr. Harris is arranging to have one of the new sets installed in a new cabinet and removed to the Underwriters Laboratories for approval. At the present time this procedure is being held up awaiting an official escutcheon plate.

May 6, 1930

- 3 -

12. PRODUCTION MATERIAL

Mr. Jacobs reported that he is now working on the new license notice for the 1930 set.

Mr. Olson reported that the production Engineering Department is still waiting for samples of the tube shield can to approve the finish. Referred to Purchasing Department.

Mr. Holly asked that orders be issued to take care of all parts which must be finished in the General Manufacturing Division. Referred to Mr. Baker.

There are some parts being made by Globe Machine Works which are likely to tie up production. Referred to Mr. Clark.

13. HAMMARLUND CONDENSERS

Mr. Holly asked about the procedure on gang condensers with the Hammarlund Corporation. He stated that to date 5000 gang condensers had been sent back in order to have the compensator screw holes re-threaded and Hammarlund are objecting to the expense connected with doing this work free of charge. It was decided that in case of any further question with this Corporation, that their Mr. King be asked to come to our plant to discuss the item in question.

14. DIAL ON THE 1930 SET

Mr. Edison stated that the dial on the 1930 set which he had was not functioning properly. Mr. Harris was asked to make additional tests on the dial for the 1930 set.

15. PITCH POTS

It is planned to have electric pitch pots with thermostat control for melting pitch to be used in the production of the 1930 sets. Mr. Holly will check up on the time required to have some of these pitch pots built and report.

There being no further business to come before the committee, the meeting adjourned.

R. M. Burns

G.

May 6, 1930

- 4 -

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph #1	Inspection Charts
Mr. McGee	" 2	Service Charts
Mr. Holly	" 8	Additional Orders Placed
Mr. Holly	" 10	Follow-up on Material
Mr. Holly	" 15	Pitch Pots

Taken from the minutes of meeting held May 6.

Copies to: Messrs. Chas. Edison
T. M. Edison
R. H. Allen
A. L. Walsh
A. A. Manchester
C. T. Jacobs
P. J. McGee
G. C. Harris
W. O. Olson
G. C. Cosden ✓

F. F. Holly
J. Holle
A. J. Rhaines
W. B. Arrowsmith
C. S. Williams
E. M. Richards
W. Hiloebrand
W. W. Cowan
E. W. Baker
R. Burns

A. J. Clark
W. A. Hardy
J. F. McCarthey
E. Trautwein
C. J. Hirsch

Building 21
May 13, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T.M. Edison, R. Burns, A.L. Walsh, A.A. Manchester, C.T. Jacobs, G.C. Harris, W.O. Olson, P.J. McGee, F.F. Holly, J. Holle, W.B. Arrowsmith, E.W. Haker, A.J. Rhaines, W.A. Hardy, W.W. Cowan, J.F. McCarthey, A.J. Clark, E.M. Richards, and R.M. Somers.

The minutes of the meeting of May 6 were approved as issued.

1. INSPECTION CHARTS

Mr. Rhaines reported that on 343 sets of the 749000 series 57.8% have passed all tests satisfactorily.

2. SERVICE CHARTS - Nothing to report.

3. TOPE OF 1929 SET

Mr. Harris is now preparing some of the 1929 sets with a tone control attachment which he will submit for Mr. Walsh's approval in the next few days.

4. POWER PACK FOR THE 1930 SET

No report yet from committee on connecting plug.

Mr. Kurtze reported that the Eby socket and plug now being used on the 1930 design had been subjected to rather severe tests in building test equipment and that the Eby socket and plug seemed to perform very satisfactorily. It was decided that if the present design of socket and plug is changed, complete specifications must be ready by June 1 so that plugs may be ordered for the remaining 4000 sets on the first release of the 1930 set.

5. LEGAL INVESTIGATIONS

Dial mechanism - No official report yet available.

Selling chassis separately - Mr. Harris is now in touch with Mr. Schermerhorn of the American Transformer Company and Mr. Walsh on this item.

Numbering of dial scale - Mr. Hardy reported that from his investigation he found that the method of numbering the dial scale for the 1930 set does not infringe any patent.

Radio-phonograph switch - Mr. Walsh will take care of this item.

6. REPORT ON FIFTY SETS

One of the 1930 sets has been sent to Kansas City for field test, and another set is being sent to the West Coast today for field test.

May 13, 1930

- 2 -

Mr. McGee submitted communications from San Francisco which indicate that the 1930 set which the Edison Distributing Corporation received there has been performing very satisfactorily. It was brought out that the Edison Distributing Corporation in San Francisco would prefer to see only three knobs on the front panel, and would prefer to have two if possible.

Mr. Walsh reported that the 1930 set unless accurately tuned does not perform well. Mr. Edison suggested the use of a Neon tube with the Light-O-Matic to assist in accurately tuning the set. Referred to Mr. Walsh.

7. ESCUTCHEON PLATE

Mr. Richards and Mr. Holly will be responsible to see that the escutcheon plates which are received for production have the correct finish. Mr. Holly stated that we will probably receive the first shipment of escutcheon plates next Thursday, May 15.

8. REPORT ON BUMP TESTS

Mr. Harris stated that recently he had a receiver unit on bump test for 12½ hours. It was found that on this unit one of the condenser leads became loose, thus rendering the set inoperative. When this lead was replaced and the set tested, it was found that there was no appreciable change in the gain of the set. Mr. Harris is now preparing to make further tests on condensers in order to determine if the compensator screws become loose.

9. UNDERWRITERS APPROVAL

Mr. Harris stated that within the next week a set will be sent to the Underwriters Laboratories for approval.

10. ADDITIONAL ORDERS PLACED

Mr. Holly submitted a memorandum covering orders placed from May 9 to May 12, inclusive. This memorandum is on file.

11. FOLLOW-UP ON MATERIAL

Mr. Haker submitted a list of 152 items which were not received according to promises up to May 13th. A copy of this list was turned over to Mr. Clark. Upon checking up these items, Mr. Clark found that approximately 70 of the items had already been received in our plant. Referred to Mr. Haker.

Mr. McCarthy submitted a report on the trip to New England territory. This report is on file. Mr. McCarthy will continue to follow up on the items which are coming from the New England territory.

May 13, 1930

- 3 -

12. FINISH PRODUCTION OF 1929 SET

Mr. Manchester stated that production on the 1929 set will probably be finished next Friday, May 16th.

13. STARTING NEW PRODUCTION

Mr. Manchester stated that four sub-assemblies for the 1930 set have already been started and three more sub-assemblies will probably be started today. Additional sub-assemblies for the 1930 set will be started as soon as material is received.

The first shipment of R-6 cabinets will leave Wisconsin today and a shipment of R-7 cabinets will leave Wisconsin on May 19th.

14. DESIGN CHANGES

The Production Department asked that standards be established on the matching of coils and gang condensers. Mr. Jacobs stated that these standards could not be established until approximately 200 sets have been put through production lines.

Mr. Edison stated that he did not favor the serrations in the end plates of the gang condensers. It was brought out that solid plates could be used on the two gang condensers but that plates of the present design must be used on the three gang.

Mr. Jacobs asked that the length of the grid lead be kept as short as possible. Referred to Production Department.

15. ENGINEERING CHANGE NOTICES - None.

16. LOCATION OF TONE CONTROL SWITCH

The committee favored changing the location of the tone control switch and putting it on the front panel. After considerable discussion, it was decided to make up two different sample sets, one using three knobs and two toggle switches on the front panel and another using four knobs and one toggle switch on the front panel. The committee will assemble at 4:00 this afternoon in the Production Engineering Department in order to decide which one of these type panels will be adopted for the 1930 set.

There being no further business to come before the committee, the meeting adjourned.

R. Burns

G.

May 13, 1930

- 4 -

REPORTS TO BE MADE AT THE NEXT RADIO COMMITTEE
MEETING

Mr. Rhaines	Paragraph 1	Inspection charts
Mr. McGee	" 2	Service charts
Mr. Harris	" 8	Report on bump tests
Mr. Holly	" 10	Additional orders placed
Mr. Holly) Mr. Haker)	" 11	Follow-up on material
Mr. Harris	" 15	Engineering change notices

Taken from minutes of meeting of May 13.

Copies to: Messrs. Chas. Edison
T.M. Edison
R.H. Allen
A.L. Walsh
A.A. Manchester
C.T. Jacobs
P.J. McGee
G.C. Harris
W.O. Olson
G.C. Gosden ✓

F.F. Holly
J. Holle
A.J. Rhaines
J.B. Arrowsmith
C.E. Williams
E.M. Richards
W. Hildebrand
W.W. Cowan
E.W. Haker
R. Burns

A.J. Clark
W.A. Hardy
J.F. McCarthy
E. Trautwein

Building 21
May 20, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, R. Burns, A. L. Walsh, A. A. Manchester, C. T. Jacobs, G. C. Harris, W. O. Olson, P. J. McGee, W. B. Arrowsmith, A. J. Clark, J. Holle, E. W. Haker, A. J. Rhaines, W. A. Hardy, W. W. Cowan, E. M. Richards and C. J. Hirsch.

The minutes of the meeting of May 13 were approved as issued.

1. INSPECTION CHARTS FOR THE 1929 SET

Mr. Rhaines reported that on 426 sets of the 749,000 series, 53.5% passed all tests satisfactorily.

2. SERVICE CHARTS FOR THE 1929 SET - No report,

3. tone FOR THE 1929 SET

Mr. Walsh stated he would like to have a tone control on the 1929 set to be operated by a knob on the front panel. Mr. Harris will make up a design of the 1929 set as suggested by Mr. Walsh for his approval.

4. POWER PACK FOR THE 1930 SET

Mr. Olson reported that a quotation had been received on the connecting plug as designed by the engineering Department and that this price is 13 $\frac{1}{2}$ ¢. The sub-committee on the connecting plug will meet today and will submit a written report on this item at the Friday meeting.

5. LEGAL INVESTIGATIONS

Dial mechanism - Nothing further to report.

Selling chassis separately - A written request has been received from American Transformer Company in which they desire to purchase some of the Edison chassis. Mr. Harris is now going into this matter with Mr. Walsh.

Radio-phonograph switch -- Mr. Hardy will notify Mr. Walsh about the number of the patent on file covering the design of the radio-phonograph switch in question. Referred to Mr. Walsh.

6. REPORT ON FIFTY SETS

Mr. McGee submitted three additional questionnaires returned from the field criticizing the design of the 1930 set. Two of these questionnaires were examined in the meeting and the contents noted. These questionnaires are on file.

It was brought out that Durham resistors were used in the construction of several of the sets now in the field and that these Durham resistors were responsible for the failure of some of the sets to perform satisfactorily. Upon investigation, it was found that the resistance of the 3500 ohm Durham resistors in the plant and in sets had considerably increased since these resistors were received in the plant. Mr. Harris submitted a memorandum stating that the International Resistor Company of Philadelphia had been informed of the poor quality of their resistors and that this company had agreed to accept all our stock on full credit basis. However, it is planned not to use any more of this company's resistors.

All the test sets which are not performing satisfactorily in the field are being recalled and will be reconstructed to conform with the latest specifications. Before any of these sets are sent to the field again they will be thoroughly tested.

Mr. Edison suggested that after gain test all test sets should be given at least a 24 hour continuous life test, and then a second gain test made. Mr. McGee will be responsible to see that all test sets which leave the plant from now on are in first class shape and properly tested before leaving.

Mr. Rhaines reported that in order to get the sets to perform satisfactorily it was necessary to knife the condensers. A committee composed of Messrs. Rhaines, Jacobs, Harris, Kurtze and Holly was appointed to take up all questions pertaining to gang condensers and report at a future meeting.

The use of a Neon tube with the Light-O-Matic on the 1930 set was referred to the Product Engineering Department for further study and report.

Mr. Edison asked that all parts that are not used in the construction of the test sets be turned over to stock, and the cost of these items deducted from the cost of the test sets.

7. ESCUTCHEON PLATES

Some of the escutcheon plates for the 1930 set have been received and were not according to specifications. The manufacturers have been notified and are now going ahead with escutcheon plates of the proper design.

8. TESTS ON PARTS FOR THE 1930 SET

Bump tests - Mr. Harris submitted a report on vibration test on a receiver unit in which it was shown that the sensitivity of the receiver unit was not decreased on account of the bump test. Mr. Harris is making further vibration tests.

Speaker heads - Mr. Harris submitted report on life tests on loud speakers, in which it was brought out that one arm of the spider of one of the Jensen speakers failed after 42 hours on violent 60-cycle oscillation. This compares with failure before 5 hours on this test made with speakers supplied to us last year. These tests

May 20, 1930

are being continued.

Resistors - Mr. Harris is continuing the life tests on all resistors used in the set.

Power transformers - Additional Tests will be made on power transformers as soon as they can be procured from Splitdorf Radio Corporation.

Dial mechanism - Additional tests are now being made on this item.

Audio transformers - Mr. McGee asked that a spot check be made on audio transformers from time to time in order to see that they are according to specifications. Referred to Mr. Rhaines.

Mr. Rhaines asked if the limits which he is now using in testing resistors are satisfactory. Mr. Jacobs was asked to notify Mr. Rhaines of those resistors which should be accurately tested in order to eliminate noise in the set.

In general, the committee felt that additional tests should be made on all parts for the 1930 set that are likely to give trouble at any time, and in addition a spot check should be made from time to time during production in order to find out if some of the material which is coming in is of inferior quality. Referred to Mr. Harris.

9. UNDERWRITERS APPROVAL

Mr. Harris is still waiting for certain production items before he can complete a set to be sent to the Underwriters for approval.

10. FOLLOW UP ON MATERIAL

Mr. Haker submitted a list of approximately 20 items which have not yet been received in quantities for production. Mr. Clark, who is now following up on these items, stated that Mr. McCarthy had gone back to the New England territory to follow up on three items which are most likely to delay production. (This list of 20 items includes those parts which have been received by us and rejected.)

The Globe Manufacturing Company are expected to make a shipment today. Mr. Clark stated that if this shipment is not made, some one will be sent to their plant to see that shipment is made as soon as possible.

A survey has been made of the promises on delivery of the different items which have not yet been received for production, and it appears that all parts to start production on the first 1000 sets will not be here until May 26.

11. FINISH 1929 PRODUCTION

All chassis for the 1929 production have been completed. Twenty-five 25-cycle power packs are now under construction and will probably be completed today. The installation of sets in cabinets

May 20, 1930.

at Silver Lake will not be completed until some time next week.

12. STARTING NEW PRODUCTION

Mr. Manchester stated that only five sub-assemblies have been started to date. Splitdorf Radio Corporation is held up waiting for material. A great deal of the material which is being received is being rejected because it is not according to specifications. Referred to Purchasing Department.

The first shipment of 112 R-6 cabinets left Chicago Sunday night enroute from Wisc. They will probably be here Wednesday or Thursday. Drawings of new cabinets are now available.

13. ENGINEERING CHANGE NOTICES - 1930 SET

R-270 Part #200481 Local Distant Switch Assembly - The leads of this part have been lengthened 12 inches. Cost to be determined later.

R-271 Part #200397 Line Switch & Leads Assembly - This part has been changed from a knob type to a toggle switch. Cost to be determined later.

R-272 Part #200129 Local Distant Switch Shielded Lead - This part has been lengthened 12 inches (See R-270). Cost to be determined later.

R-273 Part #200166 Line Switch Washer - This part has been cancelled due to change of line switch (See R-271). Cost to be determined later.

R-274 Part #200372 Local Distant Switch Bracket - This part has been added to the receiver unit. Cost to be determined later.

R-275 Part #200163 100,000 ohm Carbon Resistor - This resistor is to be used in shunt with Part #200287 on lug #6 of R. F. Unit Assembly, Part #200156, to increase screen voltage until supply of #200287 has been exhausted. Cost to be determined later.

R-276 Part #200287 This part will be omitted when present supply has been exhausted. Cost to be determined later.

R-277 Part #200166 17,000 Ohm Carbon Resistor - This part has been added to replace Part #200287 - 20,000 ohm resistor. Cost - None, due to change.

14. PLANT LAY OUT

It was decided that the elevator in Building 21 could be used to move cabinets from the first to the second floor of Building 21

May 20, 1930

in order to eliminate the expense of building a conveyor to do this work. Referred to Messrs. Schweitzer and Eaton.

It was decided to have the carpenter shop for Splitdorf Radio Corporation in Building 21.

15. SETS FOR THE RADIO SHOW

Mr. Walsh has asked for twelve sets for the Show to be in Atlantic City on the morning of May 30. Referred to committee on this item.

There being no further business to come before the committee, the meeting adjourned.

R. Burns.

May 20, 1930.

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection Charts
Mr. McGee	" 2	Service charts
Mr. McGee	" 6	Report on fifty sets
Mr. Harris	" 8	Tests on Parts for 1930 set
Mr. Haker) Mr. Clark)	" 10	Report on follow up of material
Mr. Harris	" 13	Engineering Change Notices

Taken from minutes of meeting of May 20.

Copies to: Messrs. Chas. Edison F. F. Holly A. J. Clark
T. M. Edison J. Holle W. A. Hardy
R. H. Allen A. J. Rhaines J. F. McCarthy
A. L. Walsh W. B. Arrowsmith E. Trautwein
A. A. Manchester C. S. Williams
C. T. Jacobs E. M. Richards
P. J. McGee W. Hildebrand
Mr. Rhaines G. C. Harris W. W. Cowan
Mr. McGee W. O. Olson E. W. Haker
G. C. Coaden R. Burns

Mr. McGee Report on fifty sets
Mr. Harris Tests on Parts for 1930 set
Mr. Haker) Report on follow up of material
Mr. Clark)

May 27, 1930

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs. T. M. Edison, R. Burns, A. L. Walsh, A. A. Manchester, C. T. Jacobs, G. C. Harris, W. O. Olson, P. J. McGee, J. Holle, F. F. Holly, E. W. Baker, A. J. Rhaines, W. A. Hardy and C. J. Hirsch.

Minutes of the meeting of May 20 were approved as issued.

1. INSPECTION CHARTS FOR 1929 SET

Mr. Rhaines reported on 681 sets of the 749,000 series, 54.6% have passed all tests satisfactorily.

2. SERVICE CHARTS FOR 1929 SET - Nothing to report.

3. TONE FOR THE 1929 SET

Mr. Harris is now making up a sample placing a tone control on the front panel as suggested by Mr. Walsh.

4. LEGAL INVESTIGATIONS

Dial mechanism - No written report yet available.

Radio-phonograph switch - Mr. Walsh, in conjunction with Mr. Hardy, is taking care of the legal matters in connection with this item.

5. REPORT ON FIFTY SETS

Mr. McGee, who has just returned from the field after having made several field tests with the 1930 set, stated that the set which he took out to demonstrate performed remarkably well. He stated, however, that the 1930 set did not pull in stations with as much volume as the 1929 set in the daytime. He asked that the sensitivity between 1200 and 1500 K.C. be increased on the 1930 set. In order to meet this requirement, the Research Department are designing the R. F. coils to give the increased sensitivity. Specifications showing these changes will be available tomorrow when the coil manufacturers will be notified of the changes so that they can proceed with the manufacture of R. F. coils. Mr. Holly stated that coils for the first 1000 sets are either in the plant or in transit.

It was decided to go ahead with production using the first 1000 sets of coils until coils of the new design are received. Mr. Walsh asked that sets be built as quickly as possible using the new type of coils so that dealers outside of the different metropolitan areas, who have already placed orders for sets, can be supplied. Mr. McGee was asked to see that sets using the different types of coils were properly marked and shipped to the locations as outlined by Mr. Walsh.

Mr. Rhaines asked to be supplied with one of the 1930 sets for field tests. Mr. McGee will see that this is supplied to Mr. Rhaines as soon as a set is available.

May 27, 1930

6. ESCUTCHEON PLATE

100 escutcheon plates have been received and they are satisfactory.

7. FOLLOW UP ON MATERIAL

Mr. Haker submitted a list of items on which there is not a sufficient quantity on hand to build 500 sets. This list is made up of 14 items to be supplied from Thomas A. Edison, Inc.; 12 items from Splitdorf Electrical Company; and 21 items from outside vendors. A copy of this list has been turned over to Mr. Clark in the Purchasing Department, who is now following up on these items.

It is expected that all parts to start production of the 1930 set will be available in the plant on June 2.

8. START NEW PRODUCTION

16 sub-assemblies have been started for the production of the 1930 set.

Mr. Walsh stated that the R-6 cabinets now in the plant can be refinished for production. Two of these cabinets have already been refinished and are satisfactory.

9. ENGINEERING CHANGE NOTICES

R-278 Drawing on Part No. 200359, Dial Bracket Insulator, changed to correspond to manufactured product.

R-279 Part No. 200479 Volume Control - The zero resistance of 5000 ohm has been reduced to 1000 ohms to allow lower minimum volume on strong local stations. No cost.

R-280 Part No. 200158 .09 Mfd. condenser - This has been changed from .09 Mfd. to .2 Mfd. Min. - .25 Mfd. Max. to lower resonance of audio primary circuit. Effective when supply of #200158 (.09 Mfd.) has been exhausted. See R-281.

R-281 Part No. 200384 Push Pull Input Transformer Assembly - The .09 Mfd. condenser (#200158) used in this assembly has been changed. See R-280.

R-282 Part No. 200387 Binding Post has been added to the power unit. See R-283. Cost to be determined later.

R-283 Part No. 200804 .0002 Mfd. Condenser has been added to the power unit to provide a local antenna using 110 volt line. (See R-282) Cost to be determined later.

May 27, 1930

10. LICENSE NOTICE

Mr. Hardy has turned over to Mr. Harris a copy of the license notice to be printed in connection with the manufacture of the 1930 radio sets.

11. PLANT LAY OUT

After production is started on the 1930 set, a survey will be made to determine if it is desirable to install a conveyor from the first to the second floor of Building 21 to take up cabinets. Referred to Mr. Manchester and Mr. Mildebrand.

12. SETS FOR THE RADIO SHOW

Mr. Manchester stated that 10 sets were tested last night and 12 sets will be ready for test tonight.

It was decided that after sets have been completely tested, they will be turned over to Mr. Jacobs for a final check before being turned over to Mr. McGee to be shipped to the Atlantic City Show. Six cabinets to be used for exhibition purposes at the Show are now in transit from the factory in Wisconsin.

13. TUBES

100 screen grid tubes have been received from the DeForest Radio Corporation and are now being tested to determine the mutual conductance of these tubes.

14. DESIGN CHANGES

Mr. Jacobs asked that a jumper be placed at a definite stated location on the detector unit to replace a resistor which is to be omitted. Referred to Mr. Harris to put through necessary change notice.

The next meeting will be held on Tuesday, June 3, at 2:00 P.M.

There being no further business to come before the committee, the meeting adjourned.

R. Burns

May 27, 1930

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Rhaines	Paragraph 1	Inspection charts
Mr. McGee	" 2	Service charts
Mr. Harris	" 3	Tone control for 1929 set
Mr. McGee	" 5	Report on fifty sets
Mr. Baker	" 7	Follow up on material
Mr. Holly	" 9	Engineering change notices
Mr. Harris		

Taken from minutes of meeting of May 27.

Copies to: Messrs.

Chas. Edison	F. F. Holly	A. J. Clark
T. M. Edison	J. Holle	W. A. Hardy
R. H. Allen	A. J. Rhaines	J. F. McCarthy
A. L. Walsh	W. B. Arrowsmith	E. Trautwein
A. A. Manchester	C. S. Williams	
C. T. Jacobs	E. M. Richards	
P. J. McGee	W. Hildebrand	
G. C. Harris	W. W. Cowan	
W. O. Olson	E. W. Baker	
G. C. Cosden	R. Burns	

June 3, 1930.

RADIO COMMITTEE MEETING MINUTES.

Those present at the meeting were: Messrs. R. Burns, A.A. Manchester, W.O. Olson, J. Holle, F.F. Holly, E.W. Haker, A.J. Rhaines, W.B. Arrowsmith, W.W. Cowan, and J.F. Mc Carthey.

Minutes of the meeting of May 27 were approved as issued.

1. 1930 PRODUCTION

Baffle boards- The baffle boards which have been received for 1930 production are white in color. It was decided to spray these baffle boards brown for production.

Connecting plug socket- It was decided to order 1,000 more Eby plug sockets for production,

Power transformers- Mr. Manchester reported that the power transformers which he is putting through production have a loud hum. He reported that the laminations had been changed in some of the power transformer coils but to date the source of the trouble had not been located. Referred to Mr Harris for immediate action.

Cabinets- Six carloads of cabinets have been received and have been placed at Silver Lake, where they must be refinished as they are not according to specifications. Mr Manchester asked that the size of the holes in the front panel for the knobs and L-O-M key be increased 1/8" in diameter. Referred to Mr. Richards.

Sub-assemblies- Mr. Manchester reported that all sub-assemblies have been started except the audio, detector, and dial sub-assemblies.

It is planned to build 125 sets this week.

Specifications for the wiring of the chassis and power pack, mechanical assembly, and schematic diagram are not yet available. Referred to Mr. Harris.

Sensitivity- Mr Cowan stated that the Research Engineering Department had not yet decided to increase the sensitivity of the 1930 set between 1200 and 1500 K.C. as they found the sets which were built for the Show to be very sensitive between these two frequencies. 1,000 additional sets of 4th & 5th R.F. coils have been ordered according to specifications now available.

2. TESTS ON PARTS

No written report yet available on bump test of sets in shocks. Referred to Mr. Harris.

Mr Olson reported that the Jensen speaker now on test is still functioning satisfactorily.

June 3, 1930.

3. REVISED PARTS LIST

Parts list of power pack not yet available. Referred to Mr Harris.

4 UNDERWRITERS' APPROVAL

Underwriters approval has not yet been secured on the 1930 set. Referred to Mr. Harris.

5. LICENSE NOTICE

Specifications for all license notices for the 1930 set are now available.

6. FOLLOW UP ON MATERIAL

Mr Haker reported that there are still several items to come from Splitdorf Electrical and General Manufacturing Division for the production of the first 1000 sets.

Mr. Rhaines reported that it is necessary to give all parts 100% inspection on account of the poor quality of the material that is coming in. He stated that several of the parts which have been received for the dial assembly are not according to specifications .

7. FINISH 1929 PRODUCTION

All of the 1929 chassis and power packs have not yet been installed in cabinets.

8. SETS FOR THE RADIO SHOW

Six R-6 and six R-7 sets were shipped to the Radio Show in Atlantic City on May 31, in cabinets. Five additional chassis and power packs were shipped without cabinets for exhibition purposes. 12 1929 sets were also sent to the Show. It was reported that all the sets which were sent to the Show were performing satisfactorily.

9. TUBES

100 De Forest screen grid tubes have been received in the plant and were found to be O.K.

10. ENGINEERING CHANGE NOTICES -None

It was decided that no meeting would be held Friday, June 6. The next meeting will be held on Tuesday, June 10th, at 10:00 A.M. in Room 412, Building 25.

There being no further business to come before committee, the meeting ajourned.

R. Burns.

June 3, 1930.

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE
MEETING

Mr Harris	Paragraph 2	Tests on Parts
Mr Haker	" 6	Follow up on material
Mr Harris	" 10	Engineering change notices

Taken from minutes of meeting held June 3.

Copies to: Messrs.

Chas. Edison	F.F. Holly	A.J. Clark
T.M. Edison	J. Holle	W.A. Hardy
R.H. Allen	A.J. Rhaines	J.F. McCarthy
A.L. Walsh	W.B. Arrowsmith	E. Trautwein
A.A. Manchester	C.S. Williams	
C.T. Jacobs	E.M. Richards	
P.J. Mc Gee	W. Hildebrand	
G. C. Harris	W.W. Cowan	
W.O. Olson	E.W. Haker	
G.C. Osden ✓	R. Burns	

June 10, 1930.

RADIO COMMITTEE MEETING MINUTES.

Those present at the meeting were: Messrs. R. Burns, T.M. Edison, A.L. Walsh, A.A. Manchester, G.C. Harris, W.O. Olson, J. Holle, F.F. Holly, E.W. Haker, A.J. Rhaines, P.J. McGee, W.B. Arrowsmith, C.T. Jacobs, E.M. Richards, and J.F. McCarthey.

Minutes of meeting of June 3rd were approved as issued.

1. 1930 PRODUCTION.

Power Transformers—Mr. Harris stated that the hum which had been encountered in production was not caused by loose laminations in the power transformer. He stated that heavier power transformer cans will be used for production. This heavier can will partially correct the hum which has been experienced. Mr. Harris is still working on this particular problem.

Connecting Plug and Socket— There are 1000 Eby plugs and sockets now on hand and 1000 additional have been ordered. The sub-committee on the connecting plug was asked to study the Eby plug socket to see if the design could not be improved. Referred to sub-committee for report.

Cabinets— Mr. Walsh stated that the finish on the six carloads of cabinets now at Silver Lake was not according to specifications. This matter has been taken up with the cabinet factory and to date no cabinets are available for production. Mr. Richards was asked to furnish Mr. Theodore Edison with a report on the cabinet situation, outlining in detail what has taken place since the first cabinets were received.

Mr. Richards stated that the size of the holes on the front panel has been increased as requested by the Production Department.

Mr. McGee asked that holes be placed in the cabinet underneath the power pack in order to allow air to enter the interior of the cabinet thus cooling off the resistors, power transformer, and those parts which heat up when the set is in action. Referred to Mr. Harris.

Sub-assemblies—Mr. Manchester stated that considerable difficulty is being experienced in the assembly of the dial because the dial parts do not fit together well.

2. FIRST SETS

Mr. Rhaines stated that only three sets have passed through gain so far,

June 10, 1930.

3. SENSITIVITY

Mr. Jacobs stated that no decision had yet been made to change the 4th and 5th R.F. coils so as to give increased sensitivity between 1200 and 1500 KC. Mr. Holly asked that the remaining 3,000 4th and 5th R.F. coils on the first production release be ordered as soon as possible in order to meet our production schedule. Referred to Mr. Jacobs.

Mr. Walsh stated that the production schedule for June is 1500 sets.

4. TEST ON PARTS

Mr. Harris submitted a report on the Jensen loud speaker under life test, in which it was brought out that this speaker did not fail until after a total of 250 hours on test.

No written report yet available on bump tests of sets in shocks. Referred to Mr. Harris.

5. REVISED PARTS LIST.

Mr. Harris stated that the revised parts list for the power pack is now available.

6. UNDERWRITERS APPROVAL.

Mr. Harris asked that a complete R-7 set be turned over to him in order to secure the Underwriters approval. Referred to Mr. Manchester.

7. LICENSE NOTICE .

Mr. Holly stated that 5000 license notices are now on hand for production.

8. INSTRUCTION CARD.

Mr. McGee was asked to work in conjunction with Mr. Hand to make up an instruction card for the operation of the screen grid set.

9. FOLLOW UP ON MATERIAL.

Mr. Haker stated that production is being held up waiting for parts, especially the audio unit mystery box and parts for the dial assembly.

Mr. Edison suggested that Mr. Walsh and some of the men from the West Orange plant get in touch with Mr. McChesney and the Splitdorf Electrical men in order to straighten out several difficulties on the items in question.

June 10, 1930.

Mr. Rhaines reported that the number of electrical rejects on incoming inspection is decreasing but the number of mechanical rejections is still very high, especially on Splitdorf Electrical parts.

Mr. Haker suggested that before orders are placed with vendors for future production that an investigation be made to see that the suppliers are reliable and can make prompt deliveries.

10. FINISH OF 1929 PRODUCTION

Mr. Manchester stated that the 1929 production was all completed except that additional motor boards and pick ups were needed to complete some of the combination sets now at Silver Lake.

11. TONE FOR THE 1929 Set

Mr. Harris is still working on this .

12. SETS FOR THE RADIO SHOW

Mr. McGee reported that the screen grid sets at the Radio Show performed remarkably well. He mentioned that upon unpacking these sets the balsa wood on the inside of the packing case was not properly fastened in place and the lids of the shocks were not properly nailed down.

13. ENGINEERING CHANGE NOTICES .

R-284 D-7 25,000 ohm resistor #200176 has been omitted from the detector unit assembly and jumper connected from lug #6 to lug #7 socket side, to alter automatic volume control action. No cost.

R-285 Part #200927 Power Transformer Coil Insulator(Plain End) will be used on the plain end of coil in assembly 200458 in place of Part #200846 to allow better assembling condition.

R-286 Part No. 200846 Power Transformer Coil Insulator- One of this insulator will be used in assembly # 200458 instead of two.

R-287 Part No. 200458, Power Transformer Coil and Lamination Assembly, now consists of Parts 200038, 200462, 200846, 200927.

R-288 Two of Part #200935, "A" Choke Can Spacer, have been added to the "A" Choke Assembly to reduce can vibration. Cost unknown.

R-289 Part No. 200401 Tube Socket Shield Stud has been omitted. See R-290.

R-290 Part No. 200936 Tube Socket Shield Stud has been added .See R-289.

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- R-291 Part No. 200844, Input Transformer & "A" Choke Coil Insulator, has been omitted from "A" Choke Coil and Lamination Assembly, and Push Pull Input Transformer Coil and Lamination Assembly. Cost-None.
- R-292 Part No. 200840 1/2" Friction Tape, 16" of this part has been omitted from A-P Power Unit. Saving- Unknown.

14. SUGGESTIONS TO IMPROVE 1930 SET .

Mr .Burns presented a tabulation of suggestions for improvement of the design of the 1930 set, made up from information collected by answers to questionnaires sent out with the first 1930 test sets. A number of these suggestions were considered and were referred to the Engineering Department for action.

The next meeting will be held on Tuesday, June 17, at 2:00 P.M. in Room 412, Building 25.

There being no further business to come before the committee, the meeting adjourned.

R.Burns.

G.

June 10, 1930.

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING.

Mr. Jacobs	Paragraph 3	Sensitivity
Mr. Harris	" 4	Test on Parts
Mr. Haker	" 9	Follow up on material
Mr. Harris	" 13	Engineering Change Notices

Taken from minutes of meeting held June 10.

Copies to: Messrs.

Chas. Edison	F. F. Holly	A. J. Clark
T. M. Edison	J. Holle	W. A. Hardy
R. H. Allen	A. J. Rhaines	J. F. McCarthey
A. L. Walsh	W. B. Arrowsmith	E. Trautwein
A. A. Manchester	C. S. Williams	
C. T. Jacobs	E. M. Richards	
P. J. McGee	W. Hildebrand	
G. C. Harris	W. W. Cowan	
W. O. Olson	E. W. Haker	
G. C. Cosden ✓	R. Burns	

June 17, 1930.

RADIO COMMITTEE MEETING MINUTES.

Those present at the meeting were: T.M. Edison, R. Burns, A.A. Manchester, C.T. Jacobs, P.J. McGee, G.C. Harris, W.O. Olson, J. Holle, E.W. Haker, A.J. Rhaines, W.B. Arrowsmith, E.M. Richards, J.F. McCarthey, W.W. Cowan, and C.J. Hirsch.

Minutes of the meeting of June 10 were approved as issued.

1. 1930 PRODUCTION

Power Transformers-Mr Harris stated that the causes of the hum in the 1930 set have all been located and the Production Department is now going ahead making up sets.

Connecting Plug Socket- No report yet from sub-committee on this item.

Cabinets- Sixteen cabinets were received today from Silver Lake. These cabinets have all been altered to meet the cabinet specifications.

Two additional carloads of cabinets have just been received at Silver Lake. Mr. Manchester asked if these cabinets must have a filler coat in order to give them satisfactory finish. Referred to Mr. Walsh and Mr. Richards.

Mr. Harris submitted a memorandum on the temperature in radio cabinets when the sets are in operation. Apparently it will not be necessary to place holes in the bottom of the cabinet under the power pack, as the temperature shown by the test indicates that the holes will not be necessary. Mr. Harris will make additional tests on temperatures in radio cabinets.

Mr. Richards stated that he would notify the cabinet factory so that in future the backs of the shocks can be removed for packing as suggested by Mr. McGee, instead of removing the front.

Mr. Harris and Mr. McGee asked that the last inspector on the production lines should write the serial number of the chassis and power pack on the guarantee card before the set is finally packed. Referred to Mr. Manchester and Mr. Rhaines.

2. FIRST SETS

Mr. Manchester stated that 28 complete chassis and power packs were made up yesterday and 12 more so far today. Some of these sets will be installed in cabinets this afternoon. Mr. Sheatman will arrange to have these sets shipped to the desired locations.

3. SENSITIVITY

Mr. Jacobs asked that the number of turns on the short wave primary of the 4th and 5th R.F. coils be increased to 50,

June 17, 1930.

Mr. Harris will take care of this change. It was decided to order 1000 sets of coils according to this new specification. Mr. Harris will notify the supplier about this change, and also about soldering leads to certain solder lugs on the coils.

4. TESTS

No report yet available on bump tests of sets in shocks. Referred to Mr. Harris.

5. UNDERWRITERS APPROVAL

A complete set has not yet been turned over to Mr. Harris in order to secure Underwriters approval. Referred to Mr. Manchester.

6. INSTRUCTIONS

Mr. McGee stated that the instruction book for the 1930 set will be ready in about a week.

The instruction card is now being changed as requested by Mr. Walsh.

7. FOLLOW UP ON MATERIAL

Mr. Rhaines reported that there are fewer rejections in Incoming Inspection on the material now being received in the plant.

8. ENGINEERING CHANGE NOTICES

- R-293 Part No. 200937 -1/4" Commercial Adhesive Tape has been added to Push-Pull Transformer Coil & Lamination Assembly #200385 -"B" Choke Coil and Lamination Assembly #200453. Approximately 40 inches per set - cost unknown.
- R-294 Part No. 200374, Variable Condenser Insulating Bushing, has been omitted and will be replaced by Part 200941 and 200942.
- R-295 Part No. 200941, Variable Condenser Spacing Washer, has been added to receiver unit to replace #200374. (Six to each receiver unit)
- R-296 Part No. 200942, Variable Condenser Insulating Washer (Upper). - Six of this part have been added to receiver unit to replace #200374.
- R-297 Part No. 200369, Condenser .05 Mfd. By-Pass, has been revised- replacing bare tinned lead with a maroon rubber and cotton insulated wire to reduce hum. Cost unknown. See R-298-299-300-301.
- R-298 Part No. 200131 - Auto Unit Assembly - has been revised. See R-297

June 17, 1930.

- R-299 Part No. 200165 -Detector Unit Assembly has been revised. See R-297.
- R-300 Part No. 200163, Resistor 100,000 ohms, has been omitted from the Detector Unit Assembly, to reduce hum. See R-299 & 301.
- R-301 Part No. 200161, Resistor 500,000 ohms, has been added to Detector Unit Assembly, to reduce hum. See R-300.
- R-302 Part No. 200393, 8/32 x 3/8" R.H. Iron N.P. Mach. Screw, has been omitted from the Power Unit Assembly, as a longer screw is necessary.
- R-303 Part No. 200944, 8/32 x 1/2" R.H.N.P. Iron Mach. Screw, has been added to the Power Unit Assembly to replace #200393.

9. TUBES

Mr. Rhaines reported that the DeForest screen grid tubes do not stand up under test. Mr. Harris is taking this matter up with the DeForest Radio Corporation engineers.

10. TONE FOR THE 1929 SET

Mr. Harris is now working on this item.

11. PACKING

In addition to the regular bump test of sets in shocks being made by Mr. Harris, it was decided that additional tests should be made to make sure that the 1930 radio sets will not be damaged in transit. Referred to Mr. Richards to make tests and report.

There being no further business to come before the committee, the meeting adjourned.

G.

R. Burns.

June 17, 1930.

Copies to: Messrs. Chas. Edison F.F. Holly A.J. Clark.
 T.M. Edison J. Holle W.A. Hardy
 R.H. Allen A.J. Rhaines J.F. McCarthy
 A.L. Walsh W.B. Arrowsmith E. Trautwein
 A.A. Manchester C.S. Williams
 C.T. Jacobs E.M. Richards
 P.J. McGee W. Hildebrand
 G.C. Harris W.W. Cowan
 W.O. Olson E.W. Haker
 G.C. Cosden ✓ R. Burns.

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING.

Mr. Harris	Paragraph 4	Tests
Mr. Haker	" 7	Follow up on . . . material.
Mr. Harris	" 8	Engineering Change Notices.
Mr. Richards	" 11.	Packing.

July 1, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were : Messrs. R. Burns, T.M. Edison, A.A. Manchester, C.T. Jacobs, P.J. McGee, G.C. Harris, W.O. Olson, J. Holle, E.W. Haker, A.J. Rhaines, W.B. Arrowsmith, and W.W. Cowan.

Minutes of the meeting of June 17 were approved as issued.

1. 1930 PRODUCTION

Cabinets - Considerable difficulty has been experienced during the past month with the cabinets from Wisconsin. After the cabinets were received in the plant it was found that they turned white in several different locations and could not be used for production. Upon investigation, it has been found that the apparent cause of the trouble lies with the Wisconsin factory in manufacturing the cabinets. It appears that the drying time allowed between shading stain and first coat of lacquer was not sufficient to permit the shading stain to dry properly, with the result that apparently a reaction took place between the shading stain and the lacquer when the lacquer was put on the cabinets. Tests made by the Murphy Varnish Company of Newark show that when lacquer is placed on cabinets shortly after the shading stain has been put on a condition similar to that experienced with the Wisconsin cabinets is found to exist.

In order to get some of the cabinets ready for production, several different kinds of liquid were applied in order to correct the condition which existed. Finally, Mr. Kennedy, Vice President and Chief Chemist of the Murphy Varnish Company, recommended the use of a coat of retarder cut 50-50 with flat lacquer to eliminate the white pores on our cabinets. This application was applied as recommended by Mr. Kennedy and breakdown tests were made to determine if the finish on the cabinets would stand up. Two cabinets were taken to Newark and placed under the ultra violet ray and it was found that after 16½ hrs. under the light no change took place in the color of the cabinets. This test is equivalent to approximately 132 hrs. direct sunlight in June. In addition to this, the cabinets were also subjected to drastic moisture tests. These cabinets are still undergoing test to determine how long the lacquer on our cabinets will stand up before it begins to fade. It appears that last year a shading stain was not used at the Wisconsin factory but a shading lacquer was used instead. The reason for this change from shading lacquer to shading stain at the Wisconsin plant has not yet been determined.

The cabinets now in the plant are being refinished and sets are being installed in these cabinets and packed. Approximately 30 sets were completed today.

Cabinets treated in a similar manner showed no deterioration after standing over two weeks.

Mr. Manchester reported that there are 380 complete chassis and 610 power packs now ready, waiting to be placed in cabinets. Approximately 39 complete jobs were packed up to yesterday.

July 4 1930.

R.F. Coils - Recently it was found that on damp days the sensitivity of the sets being put through the lines fell down. The reason for the lack of sensitivity was traced to the use of improperly cured bakelite by the coil manufacturer.

These R.F. coils were impregnated with varnish and this lack of sensitivity was corrected. Mr. Edison asked that additional tests be made to make sure that a good quality of bakelite is used for R.F. coils in future. Mr. Manchester reported that 1200 sets of 4th & 5th R.F. coils were received in the plant with acid soldered joints. These coils have been returned to the manufacturers. Splitdorf Radio Corporation are now planning on making 1,000 4th & 5th R.F. coils as soon as possible.

Ventilation of cabinets - Mr. Walsh and Mr. McGee have asked that additional ventilation be provided in the cabinets of the 1930 sets. Referred to Mr. Harris.

Speakers - Mr. McGee reported that many of the Jensen speakers now being used in production did not permit sufficient travel of the voice coil. Mr. Jensen is expected in our plant next Monday when Mr. McGee and Mr. Harris will take up the question of speaker performance with him.

Dials - Mr. Manchester reported that the parts for the dial being received from Splitdorf Electrical Company in Newark are not satisfactory. He suggested that if Splitdorf Electrical cannot make these parts that the General Manufacturing Division should make them. The principal difficulty is being experienced with the plunger bearing which is received at Splitdorf Electrical from the Dolcr Die Casting Company.

Mystery boxes - Mr. Manchester reported that unless additional mystery boxes conforming to our specifications are received in the next few days, that Splitdorf Radio will be required to shut down about noon on Thursday. It appears that a very large percentage of the mystery boxes now being received are being rejected.

Mr. Edison asked that Mr. Manchester advise him of the progress being made on getting dial parts and mystery boxes into the plant and, if necessary, he would take the matter up with Mr. Mc Chesney.

2. TESTS

No report yet available on tests of sets in shocks. Referred to Mr. Harris.

Mr. Harris reported that additional tests have been made on four power transformers and they were found to perform satisfactorily.

July 4, 1930

3. UNDERWRITERS APPROVAL

One of the 1930 sets is being sent to the Underwriters Laboratories today for approval.

4. FOLLOW UP ON MATERIAL

Mr. Rhaines reported that much of the material which is being received is still not according to specifications. Approximately 50% of the coils received from Polymet Manufacturing Co. have been rejected on account of the small core openings.

5. ONE FOR THE 1929 SET

Mr. Harris reported that he now has one of these sets operating but that it was not satisfactory for demonstration.

6. INSPECTION CHARTS

Mr. Rhaines was asked to furnish inspection charts on each 200 sets manufactured until such time as regular production schedule is reached.

7. SERVICE CHARTS

Mr. McGee submitted a memorandum on field service reports on the 1930 set. This memorandum is on file.

Mr. McGee mentioned that in some cases the screen grid leads were being cut by the dog houses and the tube shields. He suggested that this matter be looked into and, if necessary, change the slots to suit our conditions. Referred to Mr. Harris.

8. DIAL CALIBRATION

Specifications for the 1930 set called for condensers having a capacity of 366 mmf. The average capacity of condensers which have been received is approximately 370 mmf. This change in the capacity of the condensers has necessitated a change in the calibration of the dial. Mr. Cowan is now working on this particular problem and will have additional information tomorrow. Mr. Edison stated that he believed the Camden Condenser Company should pay for the dial scales which were scrapped. Referred to Mr. Harris.

9. ENGINEERING CHANGE NOTICES

Engineering Change Notices Nos. 304 to 342, inclusive, have been issued since the last meeting. Any information desired on any of these change notices may be obtained from the Engineering files.

10. FRONT PANEL

Mr. Harris was asked to get in touch with Mr. Richards with regard to an adjustable front panel for the 1930 set, so that an adjustment will be available to take care of the variation in the height of the chassis of the 1930 sets. Another suggestion was that the punching shaft hole in the Escutcheon plate be slightly elongated.

July 4, 1930.

At the present time, when the chassis are put in place the escutcheon plate and the dial scale vary considerably in their relative heights to one another.

11. PLANT LAY OUT

The Alvey-Ferguson Company have started to install the monorail conveyor from the second floor of Building 24 to the first floor of Building 19.

There being no further business to come before the committee, the meeting adjourned. The next meeting will be held on Tuesday, July 8, at 2:00 P.M.

G.

R. Burns.

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE MEETING

Mr. Harris	Paragraph 1	1930 Production - Ventilation of cabinets
Mr. Harris)	"	"
Mr. McGee)	2	Speakers
Mr. Harris	"	3 Tests
Mr. Rhaines	"	4 Follow Up on Material
Mr. Harris	"	5 Tone for the 1929 Set
Mr. Rhaines	"	6 Inspection Charts
Mr. McGee	"	7 Service Charts
Mr. Harris)	"	"
Mr. Cowan)	8	Dial calibration
Mr. Harris	"	9 Engineering Change Notices
Mr. Harris)	"	"
Mr. Richards)	10.	Front Panel

Copies to: Messrs.

Chas. Edison	A. J. Rhaines	E. W. Haker
T. M. Edison	J. Holle	W. A. Hardy
R. H. Allen	W. B. Arrowsmith	J. F. McCarthey
A. L. Walsh	C. S. Williams	A. J. Clark
A. A. Manchester	E. M. Richards	W. E. Kurtze
C. T. Jacobs	W. Hildebrand	H. B. Nielsen
P. J. McGee	W. W. Cowan	F. Bostock
G. C. Harris	C. W. Luhr	C. J. Clark
W. O. Olson	J. Greeley	R. Kother
G. C. Cosden	R. Burns	

July 15, 1930.

RADIO COMMITTEE MEETING MINUTES

Those present at the meeting were: Messrs: T.M. Edison, R. Burns, G.C. Harris, W.O. Olson, C.T. Jacobs, W.W. Cowan, E.M. Richards and W.B. Arrowsmith.

Minutes of the meeting of July 1 were approved as issued.

1. 1930 PRODUCTION

Cabinets - Mr. Richards reported that the lacquer on the two cabinets which were taken to the Murphy Varnish Company for test has begun to fade and the cabinets have been taken to the West Orange plant. Mr. Richards will find out the exact number of hours which the cabinets were under the ultra violet ray and report at a future meeting. He stated that the Murphy Varnish Co. believed that the tests indicated we need have no fears in regard to our lacquer.

Ventilation of cabinets- Mr. Harris reported that he is still working on this problem.

Speakers - Mr. Harris reported that the Jensen Manufacturing Company will replace all defective speakers with new ones. This is now being done.

The total number of 1930 sets packed up to July 14th was 327.

Mr. Manchester submitted a memorandum asking for release on parts for the second 5,000 sets. A copy of this has been sent to Mr. Walsh. It appears that it will take 12 weeks to get cabinets so unless immediate action is taken the Production Department will be held up for the second schedule.

2. TESTS

No report has yet been made on tests of sets in shocks. Referred to Mr. Harris.

3. UNDERWRITERS APPROVAL

Mr. Harris submitted a memorandum stating that one 1930 set has been received by the Underwriters Laboratories and is now being tested.

4. TONE FOR THE 1929 SET

No report yet available on this. Mr. Edison stated that it is important that the work on the tone for the 1929 set be completed as soon as possible.

5. INSPECTION CHARTS - No report available. Mr. Rhaines was absent.

6. SERVICE CHARTS - No report available. Mr. McGee was absent.

7. DIAL CALIBRATION - Mr. Cowan stated that he believed this question has now been settled satisfactorily.

July 15, 1930.

8. FRONT PANEL

The question of making the dial panel adjustable was referred to Mr. Harris for further study and report at a later date.

9. TUBES

Mr. Harris reported that he found the mutual conductance of the DeForest screen grid tubes high in value but when the tubes were heated up an apparent leakage took place in the tubes, thus decreasing the overall gain of the set. This trouble has not been experienced with RCA tubes. It has been found that of 100 RCA tubes tested recently, 70% were found to have a mutual conductance of 1000 micromhos or better; only one tube was found with a mutual conductance below 850 micromhos.

Ten tubes with a low mutual conductance were recently sent back to RCA for test. These have been measured and are now being returned to us to see that the standards in the Radio Division for testing tubes compare satisfactorily with the RCA standards.

Mr. Harris will continue to test tubes and will report at future meetings.

10. ENGINEERING CHANGE NOTICES

Engineering change Notices Nos. 343 to 349, inclusive, have been issued since the last meeting. Any information desired on any of these change notices may be obtained from the Engineering files.

There being no further business to come before the committee, the meeting adjourned.

R. Burns.

G.

Copies to Messrs:	Chas. Edison	A. J. Rhaines	E. W. Haker
	T. M. Edison	J. Holle	W. A. Herdy
	R. H. Allen	W. B. Arrowsmith	J. F. McCarthy
	A. L. Walsh	C. S. Williams	A. J. Clark
	A. A. Manchester	E. M. Richards	W. R. Kurtze
	C. T. Jacobs	W. Hildebrand	H. B. Nielson
	P. J. McGee	W. W. Cowan	F. Bostock
	G. C. Harris	C. W. Luhr	G. J. Clark
	W. O. Olson	J. Greeley	R. Kother
	G. C. Cosden ✓	R. Burns	

July
June 15, 1930.

REPORTS TO BE MADE AT NEXT RADIO COMMITTEE
MEETING

Mr. Richards	Paragraph 1	1930 Production - Cabinets
Mr. Harris	" 1	" Ventilation of cabinets
"	" 2	Test
"	" 3	Underwriters Approval
"	" 4	Tone for the 1929 Set
Mr. Rhaines	" 5	Inspection Charts
Mr. McGee	" 6	Service Charts
Mr. Harris	" 8	Front Panel
"	" 10	Engineering Change Notices