

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
P. J. McGee E. H. Richards G. Eaton
G. C. Harris W. Hildebrand File
W. O. Olson E. Trautwein

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

* * * * *

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. McCarthey, 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. McCarthey 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	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. 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	R. Burns	
G. O. Cosden	E. W. Haker	

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. A. 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	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	

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.

April 8, 1930

- 2 -

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

- 3 -

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

- 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	" 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 shooks 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 shooks 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. STONE 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.

April 15, 1930

- 3 -

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. Shaines
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
C. J. Hirsch

April 15, 1930

- 4 -

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.