J. C. S. M. Court 21. 1. 1965

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

THE FINNEY COMPANY,
a partnership,

Plaintiff,

v.

CIVIL ACTION NOS.

JFD ELECTRONICS CORPORATION,
a corporation,

and

and

and

and

Defendants.

PLAINTIFF'S RESPONSE TO DEFENDANT JFD
ELECTRONICS CORPORATION'S FIRST SET OF
INTERROGATORIES TO PLAINTIFF THE FINNEY COMPANY
UNDER RULE 33

In the following answers to the above-identified set of interrogatories, the reference to "plaintiff" in the singular refers to plaintiff The Finney Company, to which the interrogatories were solely directed. In each case, the answer is preceded by a statement identifying the person making the answer and any person or persons consulted by him in obtaining the answer.

INTERROGATORY 3

- 3. Referring to paragraph 21 of plaintiff's Complaint:
- (a) State whether or not plaintiff has conducted or has had conducted on its behalf, tests, measurements, analyses and/or studies relating to each of the antennas identified in answer to sub-paragraph (a) of Interrogatory 1 to determine whether or not the respective antenna structures are within the scope of the claims of each of said patents identified in answer to sub-paragraph (g) of Interrogatory 1;
- (b) If the swer to sub-paragraph (a) of this
 Interrogatory is in the affirmative, specify the nature of
 each of such tests and/or measurements and/or analyses
 and/or studies and by whom performed, the subject matter
 of each of same, and where and when said tests and/or measurements and/or analyses and/or studies were performed;
- (c) In respect of each of the tests and/or measurements and/or analyses and/or studies specified in answer to
 sub-paragraph (b) of this Interrogatory, list and identify
 all documents, known to plaintiff, which are pertinent to
 each of same;
- (d) Indicate the location of each document listed in answer to sub-paragraph (c) of this Interrogatory;
- (e) Give the names and addresses of all persons having possession, custody and/or control of each document referred

to in answer to sub-paragraphs (c), and (d) of this Interrogatory;

(f) Give the names and addresses of all persons, known to plaintiff, having knowledge which bears on such tests and/or measurements and/or analyses and/or studies.

Answer (By Lewis H. Finneburgh, Jr. - Robert Kranek and Edward Nemeth consulted)

- (a) Plaintiff Finney Manufacturing Company has made measurements of some of the antennas of defendant JFD referred to in paragraph 21 of plaintiff's Complaint (and Amended Complaint) and has made scale factor computations based on those measurements to determine whether or not the respective antenna structures are within the scope of the claims of either of the patents in suit. As to the other patents referred to on labels, cartons, or the like for such antennas of that defendant, no tests, measurements, analyses, and/or studies were required to determine whether or not the specific antenna structures were within the scope of the claims of such patents, and, therefore, no such tests, measurements, analyses, and/or studies were made for that purpose other than merely reading the claims of such patents and mentally noting the lack of correspondence between the claims of such patents and the antennas in question.
- (b) The measurements made as stated in the answer to part (a) of this interrogatory were measurements of dipole lengths

and spacings, and the computations were scale factor computations using the log periodic formulae given in the patents in suit.

The measurements and computations were made in part by Mr. L. H. Finneburgh, Jr., one of the partners of plaintiff The Finney Company, whose business address is 34 West Interstate Street, Bedford, Ohio 44014, and in part under his direction by one or more presently unidentifiable employees of Finney Manufacturing Company. Such measurements were made at Finney Manufacturing Company from time to time, the dates thereof not being determinable.

(c) The following documents prepared on the dates indicated (where known) are pertinent to the measurements referred to in the answers to parts (a) and (b) of this interrogatory:

Dimensioned diagrammatic sketches of:

<u>JFD</u>	Model .			Date	
			. :		
LPV	4				
LPV	6				
LPV	8	•	· · · .		
LPV	11				
LPV	14		. 1	÷ .	
LPV	17				
LPV-	-VU-6		1	0-4-	65
LPV-	-U21			-	•
	(Sears)				

Sheets bearing dimensional data only:

6943 (Sears) 6945 (Sears)

- (d) The documents identified in the answer to part (c) of this interrogatory are located at the offices of plaintiff
 Finney Manufacturing Company, 34 West Interstate Street, Bedford,
 Ohio 44014, and copies are in the possession of plaintiff's
 counsel John F. Pearne, 920 Midland Building, Cleveland, Ohio 44115.
- (e) No particular person or persons has or have possession, custody and/or control of the documents referred to in the answer to parts (c) and (d) of this interrogatory except in the case of the copies in the possession of plaintiff's counsel, the other copies merely being parts of the engineering records of Finney Manufacturing Company.
- (f) The persons named in parts (b) and (d) of the answer to this interrogatory and Mr. Robert C. Kranek and Mr. Edward N. Nemeth who may be addressed c/o Finney Manufacturing Company at its address given above.

INTERROGATORY 7

- 7. Referring to paragraph 21 of plaintiff's Complaint and if the answer to sub-paragraph (a) of Interrogatory 3 is in the affirmative:
 - (a) Identify each of the actual antennas tested as referred to in answer to sub-paragraph (b) of Interrogatory 3;
 - (b) State where, when, and under what circumstances plaintiff obtained each of the antennas identified as being tested;

- (c) As to each of the antennas tested, state the name and address of all persons having possession and/or custody and/or control of each of the said antennas referred to as being tested in answer to sub-paragraph (a) of this Interrogatory and including the present location of said antennas;
- (d) State whether or not plaintiff, without a motion to produce, will produce each of said antennas for inspection, and/or photographing, and/or testing by the defendant JFD Electronics Corporation;

Answer (By Lewis H. Finneburgh, Jr. - Robert Kranek and Edward Nemeth consulted)

- (a) The actual antennas tested are those identified by Model No. in the answer to part (c) of Interrogatory 3.
- (b) The antennas referred to in part (a) of this interrogatory were obtained by arranging to have them purchased on the market at different times and places prior to this litigation. Those antennas were purchased and/or tested as part of plaintiff's routine practice of examining and familiarizing itself with the products of its competitors.
- (c) No specific person has possession and/or custody and/or control of the antennas referred to as having been purchased, but they are stored on the premises of Finney Manufacturing Company at the address given above.
 - (d) Yes.

INTERROGATORY 8(a)

- 8. Referring to paragraphs 24 to 28 of plaintiff's Complaint:
- (a) List and identify each of the antennas manufactured by plaintiff referred to in paragraph 24;

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. consulted)

(a) Plaintiff manufactures for use with radio and television receivers and transmitters, the following antenna models that were referred to by plaintiff in paragraph 24 of its Complaint (and Amended Complaint) as being directly competitive with antennas of defendant JFD:

Finney Company Models

VL-5, 7, 10, 15, 18 UVF-10, 16, 18, 24 FMSL-5, 8, 10, 12

Allied Radio Corporation Models

MARK-X, XII, XVIII, XXIV

Plaintiff sells many other antennas and other products in competition with defendant JFD but which are irrelevant to this litigation and were not referred to in the Complaint (or Amended Complaint).

INTERROGATORY 12(a) and (c)-(j)

- 12. Referring to paragraph 29 of plaintiff's Complaint:
- (a) Specify each instance and act performed by the defendant, JFD Electronics Corporation and known to plaintiff where said defendant has asserted or which constituted an assertion by said defendant that all antennas of other concerns including plaintiff, that are even of a generally similar character, infringe exclusive patent rights of defendant JFD Electronic Corporation and cannot be purchased or resold by the trade without incurring patent infringement liability to defendant JFD Electronics Corporation and/or defendant, University of Illinois Foundation, including the name and address of the person or persons to whom each such assertion was made, the date each such assertion was made, the manner and means by which such assertion was made, and the manner and means by which plaintiff learned of each such instance and/or act and/or assertion performed or made by defendant, JFD Electronics Corporation;
- (c) List and identify all documents known to plaintiff which are pertinent to each of the instances and/or acts performed by defendant, JFD Electronics Corporation and/or assertions made by defendant, JFD Electronics Corporation specified in answer to sub-paragraph (a) of this Interrogatory;

- (d) Indicate the location of each document listed in answer to sub-paragraph (c) of this Interrogatory;
- (e) Give the names and addresses of all persons having possession and or custody and/or control of each document referred to in answer to sub-paragraphs (c) and (d) of this Interrogatory;
- (f) Give the names and addresses of all persons, known to plaintiff and not set forth in answer to sub-paragraph

 (a) of this Interrogatory, having knowledge which bears upon the instances and/or acts and/or assertions specified in answer to sub-paragraph (a) of this Interrogatory;
- (g)" List and identify all documents known to plaintiff which are pertinent to plaintiff's contention that each such assertion specified in answer to sub-paragraph (a) of this Interrogatory was erroneous and/or false;
- (h) Indicate the location of each document listed in answer to sub-paragraph (g) of this Interrogatory;
- (i) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (g) and (h) of this Interrogatory;
- (j) Give the names and addresses of all persons, known to plaintiff, having knowledge of the facts as set forth in answer to sub-paragraph (b) of this Interrogatory.

Answer (By John F. Pearne)

- (a) This interrogatory is apparently based upon a misconstruction of paragraph 29 of plaintiff's Complaint (and Amended Complaint), which does not allege that any single occurrence or act by defendant JFD involves an assertion or constituted an assertion of the type set forth in part (a) of this interrogatory. Plaintiff's "elaborate sales promotion scheme" (referred to in its entirety) was asserted in the Complaint (and Amended Complaint) to be "calculated to create the erroneous belief in the trade and among the public" that the situation related in part (a) of this interrogatory exists. Hence, there are no specific instances or acts which plaintiff can specify in answer to this interrogatory.
- (c)-(j) No answer required in view of the answer to part (a) of this interrogatory.

INTERROGATORY 13(a) and (c)-(j)

- 13. Referring to paragraph 29 of plaintiff's Complaint:
- (a) Specify each instance and/or act performed by defendant JFD Electronics Corporation and known to plaintiff. where said defendant asserted that plaintiff "has inaccurately and with half truths' and distortions of the truth described its antennas and comparative features thereof in plaintiff's advertising", including the name and address of the person or persons to whom each such assertion was made, the manner and means by which said assertion was made and the manner and means by which plaintiff learned of each such instance, and/or act and/or assertion; -10-

- (c) List and identify all documents known to plaintiff which are pertinent to each of the instances and/or acts performed by defendant JFD Electronics Corporation and/or assertions made by said defendant which are specified in answer to sub-paragraph (a) of this Interrogatory;
- (d) Indicate the location of each document listed in answer to sub-paragraph (c) of this Interrogatory;
- (e) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (c) and (d) of this Interrogatory;
- (f) Give the names and addresses of all persons known to plaintiff, other than those identified in answer to sub-paragraph (a) of this Interrogatory, having knowledge which bears on the instances, acts and/or assertions set forth in answer to sub-paragraph (a) of this Interrogatory;
- (g) List and identify all documents known to plaintiff which are pertinent to the facts as set forth in answer to sub-paragraph (b) of this Interrogatory;
- (h) Indicate the location of each document listed in answer to sub-paragraph (g) of this Interrogatory;

- (i) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (g) and (h) of this Interrogatory;
- (j) Give the names and addresses of all persons known to plaintiff having knowledge of the facts set forth in answer to sub-paragraph (b) of this Interrogatory.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. consulted)

(a) The part of paragraph 29 of plaintiff's Complaint (and Amended Complaint) to which this interrogatory appears to relate involves a single circular composed, printed, and distributed widely in the antenna industry and to which paragraph 36 of plaintiff's Complaint (and Amended Complaint) also relates, the act complained of being described with more particularity in said paragraph 36. The circular carries the following identification:

Plaintiff does not know how or the names and addresses of the persons to whom this circular was sent, but assumes that it was sent by mail at least to the entire customer mailing list of defendant JFD. The circular in question was brought to plaintiff's attention by a number of customers of plaintiff who may have received the circular by mail from defendant JFD.

- (c) The only documents known to plaintiff which are pertinent to the act to which this interrogatory pertains are the JFD circular identified in the answer to part (a) of this interrogatory and a "QUICK CHECK CHART" referred to therein that was previously prepared and distributed by The Finney Company.
- (d) Plaintiff has received a number of copies of the JFD circular referred to in the answer to parts (a), (b) and (c) of this interrogatory, and copies thereof are in the possession of plaintiff Morris L. Finneburgh and plaintiff's counsel, Mr. John F. Pearne, and, presumably, defendant JFD and its counsel. The reverse is believed to be true as to the second, Finney Company document referred to in the answer to part (c) of this interrogatory.
- (e) The names and addresses of the persons having possession and/or custody and/or control of the documents in question are plaintiff Morris L. Finneburgh, having the same address as Finney Manufacturing Company, and plaintiff's counsel, Mr. John F. Pearne, whose address is given above, and, presumably, unknown personnel of defendant JFD and one or more of its counsel.
- (f) None (it being assumed that the request was not intended to include the presumably hundreds of persons and concerns on the customer mailing lists of plaintiff and defendant JFD to whom the documents of those parties were respectively mailed).

(g), (h), (i), and (j) The same answers as for parts (c), (d), (e), and (f) of this interrogatory.

INTERROGATORY 15(b)-(e)

- 15. Referring to paragraph 29 of plaintiff's Complaint:
- (b) List and identify all documents known to plaintiff which are pertinent to the said contention;
- (c) Indicate the location of each document listed in answer to sub-paragraph (b) of this Interrogatory;
- (d) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (b) and (c) of this Interrogatory;
- (e) Give the names and addresses of all persons known to plaintiff having knowledge which bears on said contention.

 Answer (By John F. Pearne Lewis H. Finneburgh, Jr. consulted)
- (b) The documents listed in the longhand list supplied to counsel for plaintiff by counsel for defendant JFD in the latter's office in Chicago, Illinois, on August 4, 1965, plus what are believed to comprise numerous documents not yet identifiable by plaintiff or produced by defendants in response to plaintiff's motion under Rule 34, among which are the following:
 - (1) A single 8-1/2" x 11" blue sheet printed in black on both sides and bearing no form number or printing date (see attachment No. 1 for further identification).

- (2) Gold on black and black on white, single, 8-1/2" x 11" sheet printed on one side and headed "FM EXPERTS AGREE" (see attachment No. 2 for further identification).
- (3) Four page 8-1/2" x 11" folder reprinted from "Radio-Electronics" for June, 1963.
- (4) Memorandum dated March 1, 1965 to JFD Distributors
 from Edward Finkel of JFD Electronics Corporation (on
 8-1/2" x 7-1/4" yellow form) with attached reproduction
 of a news release of 2/12/65 from the Public Information
 Office, University of Illinois.
- (5) Articles in "Electronic Technician" for March, 1963 (p. 49) and May, 1963 (p. 36).
- (6) Four page folder reprinted from "NEDA Journal" for November, 1962, pp. 31-34.
- (7) 24 page "JFD Distributor Price Schedule Effective April 1, 1963, Form No. R63-0".
- (8) Double page advertisement in "Electronic & Appliance Specialist" for February, 1964, pp. 10-11.
- (9) Three page advertisement in "NEDA Journal" for March, 1964, pp. 27-29
- (10) Forty page Dealer Price Schedule Form No. D-64
 Effective November 1, 1964.

- (11) to (40), inclusive, comprising JFD advertising and sales promotion leaflets, brochures, and the like identified by the following form numbers: 254-261; 422; 423 (two versions); 425; 428-430, 551LP; 574LP; 674; 652; 685; 689; 705; 738; 798; 811; 830; 837; 893; 919; 102-2000M.
- (c), (d), and (e) A copy or small scale facsimile

 (as reproduced in Form 430) of each of the documents identified

 above as items (1) through (4) in the answer to part (b) of

 this interrogatory is in the possession of plaintiff's counsel,

 John F, Pearne, whose address is given above. Additional copies

 of most of those documents are also in the possession of

 plaintiff Finney Manufacturing Company at its address given above,

 but are not in the possession and/or custody and/or control of

 any specific person or persons, as previously stated. Additional

 copies are undoubtedly in the possession of defendant JFD and/or

one or more of its counsel. All such persons plus the individual plaintiffs whose business addresses are all the same and given above, are believed to have some knowledge bearing on the contention referred to in part (a) of this interrogatory. (It is assumed that the request was not intended to include the hundreds of persons and concerns on the customer mailing lists of plaintiffs and defendant JFD to whom most of the documents in question were sent by one or another of those parties to this suit and who may have some knowledge which bears on the contention in question.)

INTERROGATORY 16(b)-(e)

- 16. Referring to paragraph 30(a) of plaintiff's Complaint:
 - (b) List and identify all documents, known to plaintiff, which are pertinent to the facts specified in answer to sub-paragraph (a) of this Interrogatory;

- (c) Indicate the location of each document listed in answer to sub-paragraph (b) of this Interrogatory;
- (d) Give the names and addresses of persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (b) and (c) of this Interrogatory;
- (e) Give the names and addresses of all persons known to plaintiff having knowledge which bears on each or any of the instances and examples specified in answer to subparagraph (a) of this Interrogatory.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. consulted)

- (b) All of the documents identified in the answer to part (b) of Interrogatory 15, plus all of the additional labels and labeled cartons, and other literature, circular letters, and the like that refer to patents or to "Log Periodic" antennas and that have been distributed by defendant JFD in its sales promotion program for its so-called "log periodic" antennas and which plaintiffs cannot presently identify.
- (c), (d), and (e) Same answers as for the corresponding parts of Interrogatory 15.

INTERROGATORY 17

17. Has plaintiff, its officers, agents and/or employees in their possession, custody and/or control "labels, advertising and other sales promortion media" published or distributed by

defendant JFD Electronics Corporation in respect of its so-called "Log-Periodic" antennas; and, if so, list and identify each such piece of said labels, advertising and other sales promotion media; state how, where and under what circumstances each such piece was acquired and the name and address of the person or persons having possession and/or custody and/or control of each such piece.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. consulted)

Yes. The documents are those identified in the answer to part (b) of Interrogatory 15. Such documents were acquired in the trade in a variety of ways which plaintiff cannot presently identify or associate with any particular one of the documents.

As to the names and addresses of the person or persons having possession and/or custody and/or control of each such piece, the answer is the same as the answer to parts (c), (d), and (e) of Interrogatory 15.

INTERROGATORY 38(a) and (b)

- 38. Referring to Paragraph 30(d) of plaintiff's Complaint:
- (a) List and identify each of the customers of defendant JFD Electronics Corporation known to plaintiff to whom inferred threats were made by and/or on behalf of defendant JFD Electronics Corporation that said customers will be or may be sued for patent infringement;

- (b) Specify in detail in respect of each of said customers referred to in answer to sub-paragraph (a) of this Interposatory, each instance where such assertions were made, and, in respect of each such instance, include
 - (1) the date such assertion was made,
 - (2) the specific patent or patents involved,
 - (3) the specific antenna structure involved,
 - (4) the identity of the person to whom such assertion was made,
 - (5) the identity of the person alleged to have made such assertion,
 - (6) the substance of such assertion, and manner in which same was made, and
 - (7) list and identify all documents known to plaintiff which are pertinent to such assertion, stating its present location, and the person or persons having possession and/or custody and/or control of same or, if not known, the last known location and the name and address—of the person or persons last known to have possession, and/or custody and/or control thereof;
- Answer (By John F. Pearne Lewis H. Finneburgh, Jr. and M. L. Finneburgh consulted)
- (a) The inferred threats mentioned in paragraph 30(d) of plaintiff's Complaint (and Amended Complaint) were that the

ment "if they deal in antennas of plaintiff which are directly competitive with the so-called 'log periodic' antennas of said defendant." Such inferred threats were made to all of the persons and concerns on the customer mailing list of defendant JFD to whom its sales promotion literature was sent.

(b) Except as such threats were inferred to the trade as a whole by the sales promotion literature of defendant JFD for its so-called "log periodic" antennas, as indicated in the answer to part (a) of this interrogatory and by the objection to part (c) of Interrogatory 8, plaintiff presently lacks the information requested by this part of this interrogatory and will be seeking it by discovery from defendant JFD and others.

INTERROGATORY 39(a) and (b)

- 39. Referring to paragraph 30(d) of plaintiff's Complaint:
- (a) List and identify each of the customers of plaintiff known to plaintiff to whom inferred threats were made by and/ or on behalf of defendant JFD Electronics Corporation that said customers will be or may be sued for patent infringement
- (b) Specify in detail in respect of each of said customers referred to in answer to sub-paragraph (a) of this Interrogatory, each instance where such assertions were made,

and, in respect of each such instance, include

- (1) the date such assertion was made,
- (2) the specific patent or patents involved,
- (3) the specific antenna structure involved,
- (4) the identity of the person to whom such assertion was made,
- (5) the identity of the person alleged to have made such assertion,
- (6) the substance of such assertion, and manner in which same was made, and
- (7) list and identify all documents known to plaintiff which are pertinent to such assertion, stating its present location, and the person or persons having possession and/or custody and/or control of same or, if not known, the last known location and the name and address of the person or persons last known to have possession, and/or custody and/or control thereof;

Answer (John F. Pearne - Lewis H. Finneburgh, Jr. and M. L. Finneburgh consulted)

- (a) The customers of defendant JFD who are also customers of plaintiff.
 - (b) Same answer as for part (b) of Interrogatory 38.

INTERROGATORY 40(1)-(9)

- 40. Referring to paragraph 30(d) of plaintiff's Complaint:
- (1) list and identify all specific publications which plaintiff alleges to be libelous,
- (2) state the date and place of publication in respect of each said publication referred to in answer to sub-sub-paragraph of 1 of this Interrogatory,
- (3). State the date, place and manner in which plaintiff first became aware of each such publication referred to in sub-sub-paragraph 1 of this Interrogatory,
- (4) Identify each alleged libelous statement in each of the publications referred to in answer to sub-sub-paragraph I of this Interrogatory,
- (5) In respect of each of the statements referred to in answer to sub-sub-paragraph 1 of this Interrogatory, show how each said statement is false as alleged in Paragraph 30(e) of the plaintiff's Complaint;
- (6) List and identify all documents known to plaintiff which are pertinent to the allegations made in Paragraph 30(e) of plaintiff's Complaint,
- (7) Indicate the location of each document listed in answer to sub-sub-paragraph (6) of this Interrogatory,

- (8) Give names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-sub-paragraph (6) and (7) of this Interrogatory.
- (9) Give the names and addresses of all persons known to plaintiff having knowledge which bears on said contention.
- Answer (By John F. Pearne Lewis H. Finneburgh, Jr. and M. L. Finneburgh consulted)
- (1) The publication identified in part (a) of the answer to Interrogatory 13.
- (2) The date of the publication was, as nearly as known, about November, 1964, and the place of publication is believed to have been the offices of defendant JFD in Brooklyn, New York, from which the publication was presumably mailed.
- (3) Plaintiff learned of the publication in question from the trade on a date not known with certainty but shortly after the date the publication was mailed to the trade, by receiving copies thereof forwarded to plaintiff by members of the trade who cannot presently be identified, no record having been kept of the parties from whom they were received.
 - (4) The libelous statements are the following:
 - 1. "DON'T BE HUMBUGGED BY MISLEADING CLAIMS AND HALF TRUTHS," followed by a reference, by name, to plaintiff "The Finney Company" and by--

- 2. "Its, omissions, mistatements and distortions of the truth force us to set the record straight***."
- 3. The following untrue statements in the column headed "FINCO VL SERIES."
 - a. "Drive line can also come loose during shipping and installation."
 - b. "Drive line is prone to being jarred loose by wind and vibration. Result: electrical intermitency in form of picture flutter and crackling."
 - c. "Excessively hard aluminum wire subject to snapping or permanent deforming under wind, ice or snow loading. Snaps out of clamps in shipping." (Referring to the drive line)
 - d. "Elements are more susceptible to breakage because they cannot flex to absorb stress and strain" (due to butt seam construction of element reinforcing sleeves).
 - e. "Non-outdoor type polystyrene plastic insulator. Polystyrene will weather and crack prematurely. Companies against its use outdoors."
 - f. "Poor design will pick up noise and interference more readily." (Referring to the DC and Static Grounded System)
- 4. The following untrue statements in the column headed "FINCO"
 - a. "No" (referring to double U-bolts).
 - b. "No Thin wire rods hooked into hole at top of mast provide sole support. Will stretch and pop out under use causing antenna to break up quickly." (Referring to tubular cross arm supports)

- c. "Obsolete design, carried over from old type antenna construction, allows elements to vibrate, loosen and sway about." (Referring to lock for elements folded during shipment and unfolded at installation site)
- d. "Hand-done corodizing finish produces blotchy uneven finish."
- (5) Plaintiff knows of no "misstatements" or "distortions of the truth" made by it in any of its advertising and promotion of antennas and considers the libelous statements by defendant JFD to be false in that, (a) no such "misstatements" or "distortions of the truth" have been made by plaintiff, and (b) the statements 3a-f and 4a-d above are either outright untruths or, in the comparative manner in which they are made, are untrue comparisons.
- (6) The two documents identified in part (c) of the answer to Interrogatory 13.
- (7) Answer given in part (d) of the answer to Interrogatory 13.
- (8) Answer given in part (e) of the answer to Interrogatory 13.
- (9) Answer given in part (f) of the answer to Interrogatory 13.

INTERROGATORY 41

- 41. Referring to Paragraph 31 of plaintiff's Complaint:
- (a) State how the prestige and standing of plaintiff in the trade was injured as alleged and how such injury was manifested;

- (b) State the extent to which plaintiff's prestige and standing in the trade was injured as alleged;
- (c) Specify, in detail, the "extraordinary steps" referred to in said Paragraph 31 of plaintiff's Complaint;
- (d) Specify in detail the expenses involved in taking such "extraordinary steps" referred to in answer to sub-
- (e) List and identify all documents known to plaintiff which are pertinent to the alleged injury to plaintiff's prestige and standing in the trade, and/or which are pertinent to the "extraordinary steps" taken and/or the expenses involved therein;
 - (f) Indicate the location of each document listed in answer to sub-paragraph (e) of this Interrogatory;
- (g) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (e) and (f) of this Interrogatory;
- (h) Give the names and addresses of all persons known to plaintiff having knowledge of the facts with respect to alleged injury of plaintiff's prestige and standing in the trade, and/or the "extraordinary steps" referred to in answer to sub-paragraph (d) of this interrogatory.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. and M. L. Finneburgh consulted)

- (a) The prestige and standing of plaintiff and its products in the trade have been injured and, to an unknown degree, the enthusiasm in the trade for dealing with plaintiff with confidence and for purchasing plaintiff's products has been undermined by the libelous statements made by defendant JFD in the publication to which Interrogatories 13 and 40 refer.
- (b) The extent of such injury is not yet known to plaintiff.
- (c) The "extraordinary steps" which plaintiff found it necessary, at great expense, to take as a result of the unfair competition by defendant JFD, as alleged in paragraph 31 of plaintiff's Complaint (and Amended Complaint) comprise the following:
 - (1) Answering numerous telephone inquiries from plaintiff's customers as to the details and seriousness of the inferred threats of patent infringement made to the trade by defendant JFD.
 - (2) Answering by mail numerous inquiries received by mail from plaintiff's customers as to the details and seriousness of the inferred threats of patent infringement made to the trade by defendant JFD.
 - (3) Printing and distributing trade letters on the subject of patent infringement and related matters.

- (4) Planning and executing a program for otherwise coping with the effects of the inferred threats of patent infringement liability of plaintiff's customers and the untrue disparagement of plaintiff and its products.
- (d) Plaintiff has not yet attempted to identify or compile any record of expenses attributable to the "extraordinary steps" enumerated in the subparts of part (c) of the answer to this interrogatory, many of which expenses are not readily segregatable from other overhead expenses. Therefore, plaintiff is unable to answer this part of this interrogatory.
- (e) The following documents that are presently located in the offices of plaintiff's counsel John F. Pearne, whose address is given above:
 - Letter dated "June 1964," from plaintiff addressed generally to all FINCO Regional Managers, Representatives, and Executives
 - Letter dated "June 29, '64" from plaintiff addressed generally to all of its Regional Managers and Representatives
 - Letter dated "April 1, 1965" from plaintiff addressed generally to all FINCO Distributors, Regional Managers, Representatives, and Management and Key Personnel
 - A special file of correspondence relating to the above-mentioned "extraordinary steps" and which identifies specific customers of plaintiff.

For the protection of plaintiffs and their customers against harassment by defendant JFD, any production of the foregoing documents will be made only in camera in connection with a motion for a protective order by the Court.

INTERROGATORY 42

- 42. Referring to Paragraph 35 of plaintiff's Complaint:
- (a) Specify each of the "factual and truthful comparisons" made by plaintiff and alleged in said Paragraph 35 of plaintiff's Complaint;
- (b) Give the name and address of the person who made each such comparison;
- (c) State the date when and the location where each such comparison was made;
- (d) Specify by respective model numbers, the antennas compared;
- (e) Identify the specific antennas compared and state whether or not said antennas are still in existence;
- (f) If the antennas referred to in enswer to sub-paragraph (e) of this Interrogatory are still in existence, state the present location of each said antenna and the name and address of the person or persons having possession of and/or custody or control each of said existing antennas;

- (g) Will the plaintiff, without a motion to produce, produce said antennas identified in answer to sub-paragraphs.

 (e) and (f) of this Interrogatory for inspection and/or testing by defendant JFD Electronics Corporation?
- (h) List and identify all documents known to plaintiff which are pertinent to the comparisons specified in answer to sub-paragraph (a) of this Interrogatory;
- (i) Indicate the location of each document listed in answer to sub-paragraph (h) of this Interrogatory;
- (j) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraph (i) of this Interrogatory;
- (k) Give the names and addresses of all persons known to plaintiff having knowledge of the said comparisons and/or the manner in which said comparisons were made known to the trade and/or the public.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. consulted)

- (a) The comparisons made in the "QUICK CHECK CHART" prepared and distributed in the trade by plaintiff and referred to by defendant JFD in its libelous publication identified in the answer to Interrogatory 40(1).
- (b) Plaintiff Lewis H. Finneburgh, Jr., whose business address is given above.

- (c) The dates when such comparisons were all made were shortly prior to the date of distribution of the advertising material referred to in part (a) of this interrogatory, i.e., shortly prior to May, 1964. The location where each such comparison was made was at plaintiff's place of business in Bedford, Ohio.
- (d) The respective model numbers of the antennas compared are given in the chart referred to in part (a) of the answer to this interrogatory.
- (e) The features of the identified models of antennas of The Finney Company as their features were known to plaintiff Lewis H. Finneburgh, Jr., and no such specific antennas of plaintiffs were involved in the published comparison. The specific LPV models of antennas of JFD identified in part (c) of Interrogatory 3, which are still in existence.
- (f) At the offices of plaintiff Finney Manufacturing Company at its address given above. See also answer to part (c) of Interrogatory 7.
- (g) The JFD antennas in question will be produced for inspection and/or testing by defendant JFD with appropriate assurances from such defendant that they will not be lost, destroyed, or altered.
- (h) The particular documents in which the comparisons were published as stated in parts (a) and (c) of the answer to Interrogatory 13.

- (i) and (j) Answer given in parts (d) and (e) of the answer to Interrogatory 13.
- (k) Plaintiff is unable to determine what kind of "knowledge" is referred to in this part of this interrogatory by the phrase "knowledge of the said comparisons and/or the manner in which said comparisons were made known to the trade and/or the public." The particular comparisons referred to were made by plaintiff Lewis H. Finneburgh, Jr., whose business address is of record, as stated in part (b) of the answer to this interrogatory, and he is believed to be the only person having direct knowledge of the making of the comparisons. As indicated in the answer to part (c) of Interrogatory 3, the particular comparisons referred to were made known to the trade by distribution of copies of the chart in which those comparisons were published.

INTERROGATORY 43(a)-(d) and (f)

- 43. Referring to Paragraph 36 of plaintiff's Complaint:
- (a) Specify the particular "circular letters" referred to in said Paragraph 36 of plaintiff's Complaint;
- (b) Identify the person or persons known to plaintiff to have received each respective circular letter specified in answer to sub-paragraph (a) of this Interrogatory;

- (c) State the date, if known to plaintiff, when each of said persons identified in answer to sub-paragraph (b) of this Interrogatory received each respective circular letter specified in answer to sub-paragraph (a) of this Interrogatory, and the manner and means by which such person received said letter;
- (d) State the date on which, and the manner and means by which plaintiff became aware of each such circular letter specified in answer to sub-paragraph (a) of this Interrogatory;
- (f) State whether or not any person or persons identified in answer to sub-paragraph (b) of this interrogatory are or were customers of plaintiff, identify each of those persons referred to in answer to sub-paragraph (f) of this Interrogatory who ceased to be a customer of plaintiff as a result of the receipt of said circular letters.
- Answer By John. F. Pearne Lewis H. Finneburgh, Jr. and M. L. Finneburgh consulted)
- (a) The circular identified in the answer to part (a) of Interrogatory 13.
- (b) Plaintiff has received a number of copies of the circular in question, and, on information and belief, copies were received by all of the persons and concerns on the customer mailing list of JFD.

- (c) The circular in question was presumably received by plaintiff shortly after the date on which it was mailed by defendant JFD, which date is not presently known to plaintiff, and, on information and belief, all such other persons and concerns, received the circular in question by mail about the same time.
- (d) To the extent known, the requested information is given in part (c) of the answer to this interrogatory.
- (f) Yes, but none of such persons ceased to be a customer of plaintiff as a result of receipt of the circular letter in question, although the purchases of certain of plaintiff's antennas by such persons has unquestionably been curtailed as a result of defendant's conduct as a whole (including its publication of the circular letter in question).

INTERROGATORY 45(b)-(e)

Referring to Paragraph 38 of plaintiff's Complaint:

- (b) List and identify all documents known to plaintiff which are pertinent to said contention;
- (c) Indicate the location of each document listed in answer to sub-paragraph (b) of this Interrogatory;
- (d) Give the names and addresses of all persons having possession and/or custody and/or control of each document referred to in answer to sub-paragraphs (b) and (c) of this Interrogatory;

- (e) Give the names and addresses of all persons known to plaintiff having knowledge which bears on said contention.

 Answer (By John F. Pearne)
 - (b) Plaintiff knows of no such documents.
- (c) and (d) No answer required in view of part (b) of the answer to this interrogatory.
- (e) All counsel for all parties to this suit, whose names and addresses are of record.

INTERROGATORY 46(a), (b), and (d)

placed by any and advantage and highly that properties

- 46. Referring to Paragraph 38 of plaintiff's complaint;
- (a) State whether or not plaintiff received the "news release" set forth in Paragraph 38 of plaintiff's Complaint;
- (b) If the answer to sub-paragraph (a) of this interrogatory is in the affirmative, give the date on which said "news release" was received;
- (d) As to each of the others in the trade identified in answer to sub-paragraph (c) of this interrogatory, state the manner and means, if known by plaintiff, that such person or persons received said "news release";

Answer (By John F. Pearne - M. L. Finneburgh consulted)

- (a) Yes.
- (b) Plaintiff does not know the date on which it first received a copy of said "news release," but copies thereof attached to a covering communication originating from defendant JFD were received by plaintiff from various sources on and shortly after March 10, 1965.
 - (d) By mail from defendant JFD.

INTERROGATORY 47

47. Referring to Paragraph 40 of plaintiff's Complaint, specify the identity of those "customers in the antenna business" to whom reference is made in the allegations of said Paragraph 40.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. and M. L. Finneburgh consulted)

Plaintiff is able to answer this interrogatory only by stating that the "customers***in the antenna business" to which this interrogatory refers are the customers of defendant JFD who are also customers of plaintiff.

INTERROGATORY 48

48. State whether of not plaintiff purchased or otherwise acquired any antennas manufactured and/or sold by defendant JFD Electronics Corporation.

Answer (By Lewis H. Finneburgh, Jr. - Robert Kranek and Edward Nemeth consulted)

Yes.

INTERROGATORY 49

- 49. If the answer to Interrogatory 48 is in the affirmative for each such antenna purchased or otherwise acquired,
 - (a) Identify such antenna by model number and serial number, if any so appear
 - (b): State where such antenna was acquired
 - (c) State how such antenna was acquired
 - (d) State when such antenna was acquired
 - (e) State the circumstances under which such antenna was acquired
 - (f) Give the names and addresses of the person or persons from whom such antenna was acquired
 - (g) State the present location of such antenna
 - (h) Give the name and address of the person known to plaintiff presently to have possession and/or custody and/or control of such antenna
 - (i) State whether or not plaintiff, without a motion to produce, will produce such antenna for inspection, and/or photographing by defendant JFD Electronics Corporation

Answer (By John F. Pearne - Robert Kranek, Edward Nemeth and Lewis H. Finneburgh, Jr. consulted)

(a)	JFD Model	Date Received
	LPV-4	7-30-63
	LPV-6	3- 1-63
	LPV-8	3- 1-63
	LPV-11	3- 1-63
	LPV-14	3- 1-63
	LPV-17	7-26-63
	LPV-VU-6	8-23-65
	LPV-U21	11-13-64
	6943 (Sears)	2-14-65
	6944 (Sears)	2-14-65
	6945 (Sears)	2-14-65
	LPV-U21	11-13-64
	LPL-FM 6	9-29-64
	LPL-FM 10	10-16-64
	91CZ510 (Allied)	4-28-64

- (b), (c), (e), and (f) The antennas referred to were procured for plaintiff by various presently unidentifiable persons from presently unknown trade sources as stated in part (b) of the answer to Interrogatory 7.
 - (d) See answer to part (a) of this interrogatory.
- (g) Finney Manufacturing Company at its address given above.
 - (h) Same answer as for part (c) of Interrogatory 7.
 - (i) Same answer as for part (g) of Interrogatory 42.

INTERROGATORY 50(g)

50. Specify the details of all antenna performance tests and measurements and of all mathematical, statistical, graphical and other analyses performed by plaintiff, its officers, agents

employees or others on behalf of plaintiff to compare antennas manufactured by defendant JFD Electronics Corporation and those manufactured by or for plaintiff and/or others, including as to each test,***(this portion and parts (a)-(f) are the subjects of objections filed and served by plaintiff).

(g) State whether or not a written record of each test is in existence, and, if so, give the present location thereof, the name and addresses of the persons who have possession and/or custody and/or control thereof and identify the person making such written record.

Answer (By John F. Pearne - Lewis H. Finneburgh, Jr. consulted)

(g) Yes. All such records are in the offices of Finney Manufacturing Company at its address given above as part of the engineering records of the company. They are not in the possession, custody or control of any specific person or persons. The records were all made by one or more of the following persons in the employ of Finney Manufacturing Company:

Robert C. Kranek Edward N. Nemeth

INTERROGATORY 51

51. Has plaintiff composed, printed, published or distributed to its customers, and/or salesmen and/or sales representatives and/or employees and/or agents and/or dealers and/or distributors, the customers of defendant JFD Electronics Corporation and/or its salesmen, and/or its sales representatives and/or its employees and/or its agents and/or its dealers and/or its distributors/to the gen-

eral trade or to the public or caused to be so composed, printed, published or distributed to the same, any document comparing plaintiff's antennas with antennas manufactured and sold by defendant JFD Electronics Corporation?

Answer (By Lewis H. Finneburgh, Jr.)
Yes.

INTERROGATORY 52

52. If the answer to Interrogatory 51 is in the affirmative, list and identify each such document, stating the circumstances under which each document was prepared and distributed, the date each document was prepared and distributed, the number of each document distributed, the names and addresses of the person or persons who prepared each document, the names and addresses of the person or persons having possession, custody or control of each such document and the names and addresses of persons known to plaintiff having knowledge bearing upon each or any one of said documents.

Answer (By Lewis H. Finneburgh, Jr. - M. L. Finneburgh consulted)

The "QUICK CHECK CHART" identified in the answer to

Interrogatory 13. It was prepared and distributed as a part of
the advertising program of plaintiff The Finney Company on the
approximate date indicated in part (c) of the answer to

125,000

Interrogatory 42. Approximately / of such documents were

distributed. The document was prepared by Lewis H. Finneburgh, Jr., whose address is given above. Assuming that this interrogatory was not intended to request identification of the hundreds of persons and concerns on the customer mailing list of plaintiff to whom the document in question was mailed, the person or persons having possession, custody, or control of the document in question are the plaintiff partners and their counsel John F. Pearne, whose addresses are given above, and, presumably, defendant JFD and its counsel. Construing the last part of this interrogatory as not being intended to include the hundreds of persons and concerns on the customer mailing list of plaintiff, plaintiff does not know what kind of "knowledge bearing upon each or any one of said documents" defendant JFD had in mind and, therefore, plaintiff is unable to give the names and addresses of any such additional persons.

INTERROGATORY 53

If the answer to Interrogatory 51 is in the affirmative, state the category of person or persons to whom each such document was distributed.

Answer (By Lewis H. Finneburgh, Jr. - M. L. Finneburgh consulted)

All persons in the sales organization of plaintiff and all persons and concerns on the customer mailing list of plaintiff.



INTERROGATORY 56

56. With respect to each of the foregoing Interrogatory Nos. 1-55, where the person answering the Interrogatory has consulted with another person to obtain the answer called for, please identify such other person giving his name, address, and employer.

Answer (By John F. Pearne)

Where the person answering each of the foregoing interrogatories has consulted with another person to obtain the answer called for, such other person has been identified in the answer to the interrogatory.

Lewis H. Finneburgh, Jr!

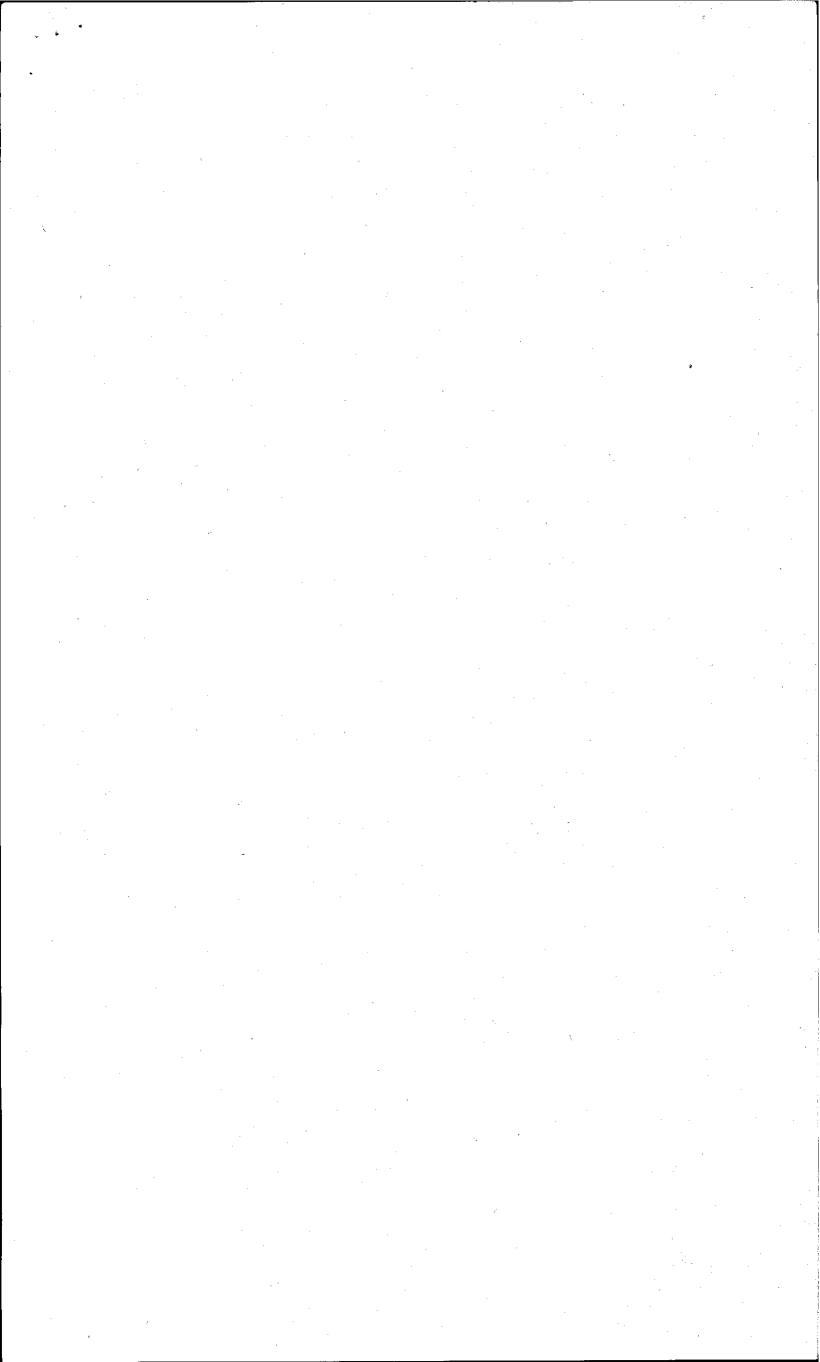
STATE OF OHIO) SS:

Lewis H. Finneburgh, Jr., who signed the foregoing answers to interrogatories, being duly sworn by me, deposed and said that the answers given in whole or in part by him, either individually or jointly with John F. Pearne, are true to the best of his knowledge and belief.

CLIFFORD A TAFER, Notary Public My Commission Expires June 21, 1970

STATE OF OHIO) SS:

John F. Pearne, who signed the foregoing answers to interrogatories, being duly sworn by me, deposed and said that



the answers given in whole or in part by him, either individually or jointly with Lewis H. Finneburgh, Jr., are true to the best of his knowledge and belief.

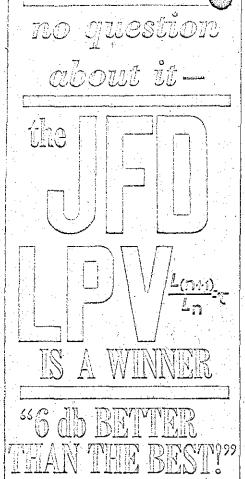
Elizabeth Plumb Notary Jublic

CERTIFICATE OF SERVICE

A copy of the foregoing "PLAINTIFF'S RESPONSE TO DEFENDANT JFD ELECTRONICS CORPORATION'S FIRST SET OF INTERROGATORIES TO PLAINTIFF THE FINNEY COMPANY UNDER RULE 33" was mailed this 7th day of October, 1965, postage prepaid, to each of the following:

I. Irving Silverman, Esq. Silverman & Cass 105 West Adams Street Chicago, Illinois 60603

Basil P. Mann, Esq. Merriam, Marshall, Shapiro & Klose 30 West Monroe Street Chicago, Illinois 60603



If you are installing JFD Log Periodic LPV's, no doubt you will agree with this report from R. L. Monroe, a leading TV antenna service-dealer of Charleston, West Virginia-a problem reception area.

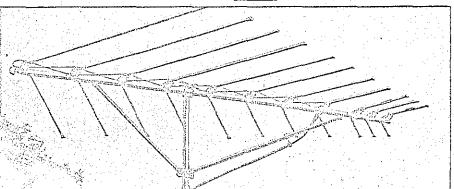
"It beats all, it beats everything that I have ever seen. Not only that, but this antenna is better than 6 db better than the best that I have installed. It pulled in a consistently clear picture from Columbus, over 130 miles away. *** *** *** * "It's just great on color -turns browns into real reds, faded bluish greens into brilliant greens, and completely eliminates the chronic ghost problems we have been suffering from in this area."

***I have been in this business since 1948, which is a considerable time, particularly in the valley, and have yet to see any antenna, even near to this log periodic antenna in performance of the things I have wanted."

Why the JFD Log Periodic LPV Outperforms Every TV Antenna Ever Made!

The log-periodic LPV blows the whistle on cumbersome antennas with their "Chinese puzzle" combinations of collectors, directors and reflectors. Now a single precisely-engineered antenna-the first based on a geometrically-derived logarithmic scale-actually tunes itself to the desired channel for unprecedented performance in crisp black and white or stunning color-plus FM STEREO. Is it any wonder that never before have so many installers and technicians so quickly acclaimed a TV antenna?

We would like to tell you more about the LPV, and how its frequency independent characteristics, have broken through distance, ghost and interference barriers to bring clear, steady pictures into previously "impossible" areas. Write today for your log periodic LPV Sales Kit. Better yet, call your JFD distributor and try one with our money-back guarantee of a better picture. You will prove it to yourself.



Developed by the University of Illinois Antenna Laboratory-Now Serving in Satellite Telemetry-Adopted to TV by JFD! THE LOG PERIODIC LPV ENDS THE ERA OR ANTENNA COMPROMISE! FOR THE PIRST THE ONE SCIENTIFICALLY FORMULATED FIGURATION SATISFIES ANY LOCATION DEMAND:

Harmonically resonant V-element operate on the Log-Periodic Cellular Principle in the Pundamental and Third Harmonic Modes for unprecedented performance —in color—in black and white—plus FW STEREO

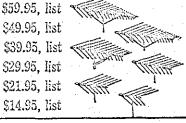
LPV17: 18 Active Cell and Director System—up to 175 miles 15 Active Cell and Director System-up to 150 miles

LPV11: 11 Active Cell and Director System—up to 125 miles

LPV8: 7 Active Cell and Director System—up to 100 miles LPV6: 6 Active Cell System-up to 75 miles

4 Active Cell System-up to 50 miles

\$29.95, list \$21.95, list





LPV4:

15th Avenue at 62nd Street, Brooklyn 19, N.Y. JFD Electronics-Southern Inc., Oxford, North Carolina JFD International, 15 Moore Street, New York, N.Y. JFD Canada, Ltd., 51 McCormack Street, Toronto, Ont 401-144 W. Hastings Street, Vancouver 3, B.C.

W H($\mathfrak{g}(\mathfrak{g})$ SIDIC ACTUANCES

THE UNIVERSITY OF ILLINOIS* ANTENNA RESEARCH LABORATORY,

PROVED-OUT IN AIR FORCE SATELLITE TELEMETRY
—THIS MISTORIC NEW PRINCIPLE ENDS THE "ERA OF COMPROMISE" IN TV ANTENNA DESIGN

- O IT COULD ONLY HAVE BEEN PRODUCED by such massed resources as those of a prominent university, the military, and the country's leading antenna manufacturer.
- BECAUSE ITS GAIN IS INDEPENDENT OF FREQUENCY, the end-fired log-periodic LPV functions with total effi-ciency across the entire band—is comparable on any
- channel to a tuned Yagi cut to that channel.

 O ON VIRTUALLY EVERY COUNT IT OUTPERFORMS PREVI-OUS WIDE-BAND ARRAYS: in gain, in directivity, in bandpass, in front-to-back ratio. Develops gain as high as 7 db on low band and 10 db on high band in the 11-element model. Shows flat response across all 12 channels — with greater gain on the high band, where it's needed most. Result: An all-channel, all-purpose antenna with unprecedented power, a decisive end to snow and ghosts, and the truest color reception yet—as well as vivid sharpness in black-and-white. And the basic log-periodic LPV principle can be adapted to any future UHF antenna needs.
- antenna with unprecedented power, a decisive end to snow and ghosts, and the truest color reception yet—as well as vivid sharpness in black-and-white. And the basic logperiodic LPV principle can be adapted to any future UHF antenna noeds.
- O MORE, FAR MORE, THAN JUST A "FRINGE" SOLU-TION, the log-periodic LPV achieves superior reception in all multi-channel areas. It is the first true "universal" antenna. And it will open key profit opportunities to you in the months shead—not only because it puts better reception within the reach of virtually every TV set-owner, but because it enables you for the first time to meet all antenna needs with a single antenna line.
- OU. S. PATENT NUMBERS: 2,958,081 2,985, 3,011,168 OTHER PATENTS PENDING *produced exclusively by JFD Electronics under license from the University of Illinois Foundation. - 2,985,879
- O NOT A "CATCH-ALL COMPROMISE"—the log-periodic LPV signals a halt to the endless piling-on of narrow-band elements and trimmers. Derived from an antenna geometry that repeats the electrical properties of the antenna periodically with the logarithm of the frequency, it is essentially frequency-independent. (Actually, the basic log-periodic design is capable of receiving a range as broad as 54 to 890 mcs. or broader.)
- O DEVELOPED TO MEST THE AIR FORCE'S RIGOROUS STANDARDS OF RELIA-BILITY, RUGGEDNESS, HIGH PERFORMANCE—built to uncompromising JFD spec-ifications—of AAA† Gold Bond Alodized aircraft aluminum for enduring good looks. 100% PREASSEMBLED FLIP-QUICK CONSTRUCTION-with new JFD "tank-turret" aluminum brackets that align and double-lock elements instantly, permanently in place,
- O RECEIVES FM, TOO-delivers drift-free, distortion-free FM stereo. Harmonically resonant V-elements operating on the Log-Periodic

THE PERSON NAMED IN



*Antenna Research Laboratory

	Collular Principle in the Fundamental and Third Harmonic Modes:								
	FOR THE BEST PICTURE, COLOR AND BLACK & WHITE- USE THE BEST ANTENNA	MODEL	DESCRIPTION	LIST PRICE	STD.	Sugge 1-4	sted Deal	er Prices	
	NEW CONTRACTOR OF THE PARTY OF	LPV17	18 Active Cell	59.95	l	35.97	32.37	29.93	
	up to 175 miles		and director system						
	NEW up to 150 miles	LPV14	15 Active Cell and director system	49.95	1	29.97	26.97	24.98	
	WEW up to 125 miles	LPVII	ll Active Cell and director system	39.95	ì	23.97	21.57	19.98	
1	NEW up to 100 miles	LPV8	8 Active Cell and director system	29.95	1	17.97	16.17	14.98	
	NEW up to 75 miles	LPV6	6 Active Cell system	21.95	1	13.17	11.85	10.98	
	NEW up to 50 miles	LPV4	4 Active Cell system	14.95	1	8.97	8.07	7.48	

"I would like to take this opportunity to tell you how pleased I am with the new JFD-LPL-FM 10 antenna."

Geoffrey M. Nathanson-Editor and Publisher FM & FINE ARTS

"The Log-Periodic FM 8 has brought the signal in with amazing clarity, and strength."

Seymour N. Siegel, Director STATION WNYC-FM

"We have just finished a thorough test of your LPL-FM 10 and can confidently state that it is all that you have said."

A. L. Stewart, Chief Engineer

STATION WEKZ-AM-FM

"I have found the LPL-FM 6 log periodic antenna to meet all these requirements. I am very happy with this antenna and I highly recommend it.

Robert M. Kanner, Engineering Maintenance Supervisor RADIO STATION WMCA

"Our tests indicate that the full wavelength elements used in

this new line provide twice the gain of the best 10-element f-m yagis."

Ed Walter, Editor ELECTRONIC DISTRIBUTING MAGAZINE

"I now know there really is a Santa Claus, because he brought me the best FM reception that I have ever had with my JFD LPL FM 10 Antenna."

Paul Dean Ford, Licensee WPFR (FM)

"We have been testing your new LPL-FM 10 Log Periodic antenna with very good results."

Guy Dryden, Chief Engineer WTBC AM-FM

I wish to thank you for the opportunity of trying the new "I wish to thank you for the opportunity of trying the new JFD FM 10. As you know, in this area we have a severe multipath problem and I feel this new JFD antenna will help this problem in many locations."

W. T. Jones

MUSI-CAL PLANNED MUSIC PROGRAMMING

Features full-wave log-periodic Ldipole system.

 Derived from the powerful logarithmic periodic array used to track America's missiles and satellites through space - discovered by the Antenna Research Laboratories of the University of Illinois.

No wonder! The all-new JFD LPL-FM antenna is log-periodic engineered to give you up to 41% more gain, plus the directional selectivity, and wideband response your system needs for fidelity FM stereo or mono performance.

The secret is in the full-wave log periodic L-dipole cells that work with amazing frequency - independent effi-ciency and directivity over the entire 88-108 mc. FM/FM stereo range. Result: the purest FM sound your system has ever reproduced—on more stations-near or far.

Four LPL-FM antennas to choose from

Model Range (up to) List LPL-FM 10 to 175 miles \$49.95 (illustrated) LPL-FM 8 to 150 miles \$39.95 LPL-FM 6 to 125 miles \$29.95

LPL-FM 4 to 75 miles \$19.95 PICK UP MORE STATIONS . . . IMPROVE STEREO RECEPTION!

with the JFD FM Tele-Amp Amplifier. Strength ens weak signals . . . feeds up to two FM receivers with crisp, distortion-free FM mono or stereo. Space-age circuitry provides up to 18 db. of amplification without overloading. No controls or adjustment. Uses standard 117 V.A.C. Model FT1 \$34.95

GET RID OF INTERFERENCE!

GET RID OF INTERFERENCE!
Shut out interference and unwanted signals from TV, amateur and citizen's band radio, ignition and fluorescent noise with the JFD TV/FM Filter/Signal Splitter. Also electronically combines any TV antenna with any FM antenna so only one down-lead is needed. Also separates TV/FM signal of combination TV/FM antennas for input into separate TV set and FM system.

SSTVFM

2:3-\$ 5.95

JFD ELECTRONICS CORPORATION

15th Avenue at S2nd Street, Brooklyn, New York 11219 U.S.A.

Attachment No. 2