Amendment No. 1 of Specification IRS TC 76-2000   ANNEXURE-A
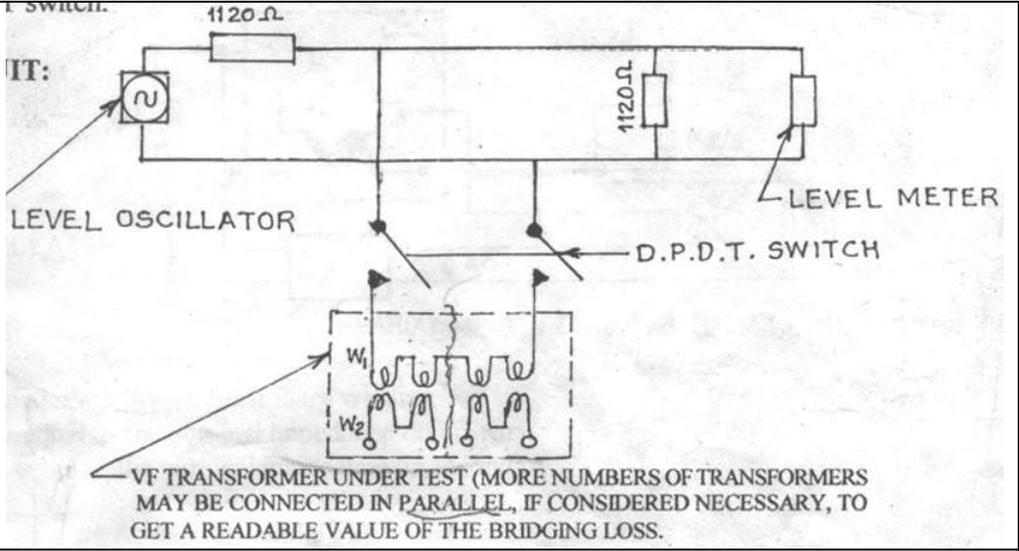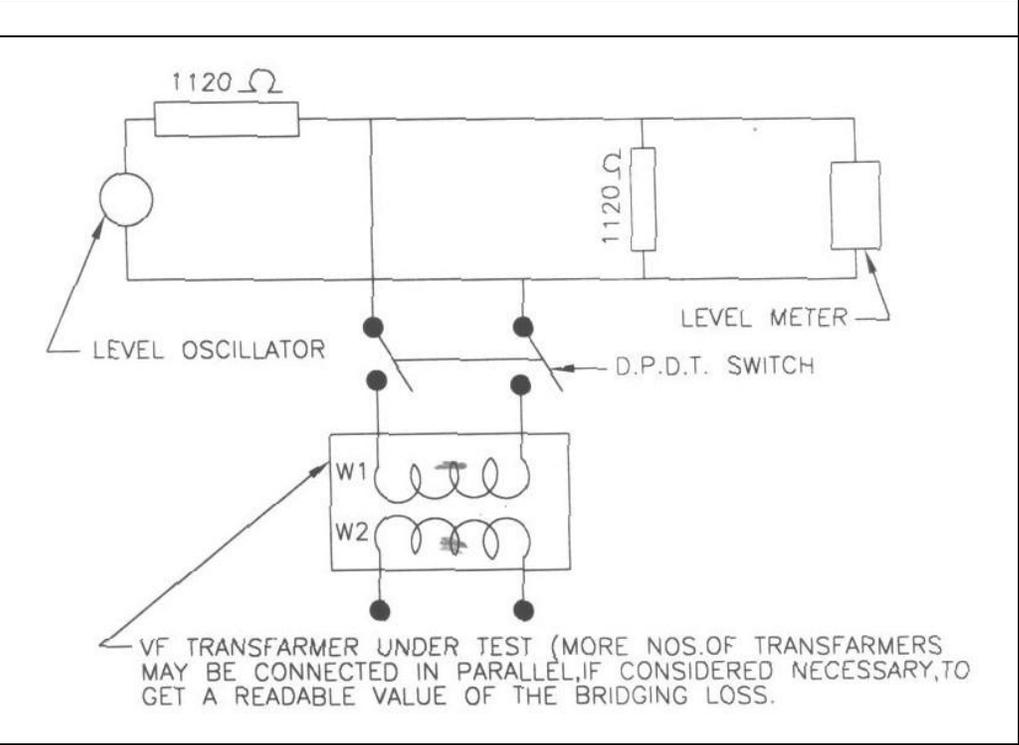
S.No.	Clause No.	Existing Clause	Amended Clause	Reason for Amendment
1	0.1	This specification is issued under the fixed serial No. IRS: TC 76, followed by the year of adoption as standard or in the case of revision, the year of last revision .	This specification is issued under the fixed serial No. IRS: TC 76, followed by the year of adoption as standard or in the case of revision, the year of last revision .**Year of adoption is 2000.**	Sentence "year of adoption is 2000" added
2	3.4	New clause	The tolerance in characteristics impedance mentioned in para 3.1 (measured at frequency 800 Hz) shall be +/- 10 %.	Tolerance in the impedance was not mentioned. As per clause No 5.9.6 of IRS TC: 30 /96, (specification of underground Quad cable.) the tolerance in the characteristics is ± 10%
3	6.1	**Note:** For the purpose of type tests, return loss, **inspection** loss and winding balance tests of V.F. transformers shall be conducted at input levels from 0.1 to 10.0 milli watts.	**Note:** For the purpose of type tests, return loss, **insertion** loss and winding balance tests of V.F. transformers shall be conducted at input levels from 0.1 to 10.0 milli watts.	. "Inspection" word has been replaced by "Insertion".
4	6.3	The following shall constitute **Acceptance Tests**: To be carried out on bulk produces lot by RDSO official or purchaser/consignee's representative as the case be	The following shall constitute **Acceptance Tests**: To be carried out on bulk produces lot by RDSO official or purchaser/consignee's representative as the case **may** be	. The word "may" added.
5	6.6	There shall be no defect of sealing as indicated by the appearance of air bubbles when the transformer is immersed in water containing suitable detergent (1/2 oz, per gallon) the water being	There shall be no defect of sealing as indicated by the appearance of air bubbles when the transformer is immersed in water containing suitable detergent (1/2 oz, per gallon) **then the temperature of water being raised from** 8.5℃ to 90℃ and maintained at the	The part of the sentence added to make the clause clear & unambiguous.

		raised to a temperature of 8.5ºC to 90ºC and maintained at the temperature for 15 minutes. For production test, suitable high temperature oil may be used instead of water	temperature for 15 minutes. For production test, suitable high temperature oil may be used instead of water.	
6	8	The number of 2T/3T (N_1) as given in Col.2 shall first be selected and subjected to the acceptance test. If in the first sample the number of defective 2T/3T, that is those failing in one or more acceptance tests, is less than/equal to the corresponding number C1 given in column 5, the lot shall be consider as confirming to the requirements of the acceptance test. If the number of defective 2T/3T in the first sample is greater than or equal to the rejection number given in Col.6 the lot shall be acceptance test. If number of defective 2T/3T in the first sample lies between (C_1) and (C_2) a second sample of the size (N_2) as given in Col.3 shall be selected and subjected to acceptance test. If in the combined sample, the number of defective 2T/3T is less than (C_1) the lot shall be considered as conforming to the requirements of acceptance test.	The number of 2T/3T (N_1) as given in Col.2 shall first be selected and subjected to the acceptance test. If in the first sample the number of defective 2T/3T, that is those failing in one or more acceptance tests, is less than/equal to the corresponding number C1 given in column 5, the lot shall be considered as conforming to the requirements of the acceptance test. If the number of defective 2T/3T in the first sample is greater than or equal to the rejection number given in Col.6 the lot shall be **considered as non conforming to the requirements of** acceptance test. If number of defective 2T/3T in the first sample lies between (C_1) and (C_2), a second sample of the size (N_2) as given in Col.3 shall be selected and subjected to acceptance test. If in the combined sample, the number of defective 2T/3T is less than (C_1), the lot shall be considered as conforming to the requirements of acceptance test**, otherwise not.**	The part of the sentence add to make the clause clear.

| 7. | Appendix –A (Cl. 6.9.1c) Impedance Ratio measurement of V.F. Transformers (2T/3T). Method -A | R_1 = Resistance equal to the nominal impedance of the **secondary** side. R_2 = Resistance equal to the nominal impedance of the secondary side

Primary impedance = Reading Z_1 indicated by the meter. Similarly, for secondary impedance measurement connect the meter on the secondary side and terminate primary by R_1.

Secondary impedance = Reading ratio = Z_1/Z_2 Where Z_1= Primary impedance measured when the secondary is terminated with resistance R_2. Z_2 = Secondary impedance measured when the primary is terminated with resistance R_1. | R_1 = Resistance equal to the nominal impedance of the **primary** side. R_2 = Resistance equal to the nominal **impedance of the secondary side**

Primary impedance = Reading Z_1 indicated by the meter. Similarly, for secondary impedance measurement connect the meter on the secondary side and terminate primary by R_1.

Secondary impedance = **Reading Z2 indicated by meter**. **Impedance ratio = Reading Ratio =Z_1/Z_2** Where Z_1= Primary impedance measured when the secondary is terminated with resistance R_2. Z_2 = Secondary impedance measured when the primary is terminated with resistance R_1. | The clause has been made clear by adding suitable word . |
| 8. | Appendix –A Method B | W_1 = Primary winding, W_2 = Secondary winding Adjust voltage V corresponding to 0 dBm level with reference to R_1. Measurement V_R and thereby current. **1 V_R/R_1** Primary impedance = V/1 Ohms. | W_1 = Primary winding, W_2 = Secondary winding Adjust voltage V corresponding to 0 dBm level with reference to R_1. Measurement V_R and thereby current. **I=V_R/R_1** Primary impedance = V/1 Ohms. | Typographical error corrected to make the clause clear. |

9.	Appendix –DC(Cl.6.9.1f) Bridging Loss measurement **Existing drawing**	
	Amended drawing	

Note :Drawing has been changed as two transformers have been shown connected in series in existing drawing instead of parallel.