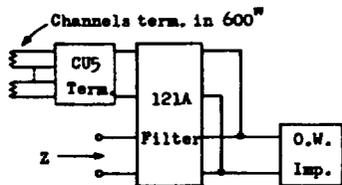
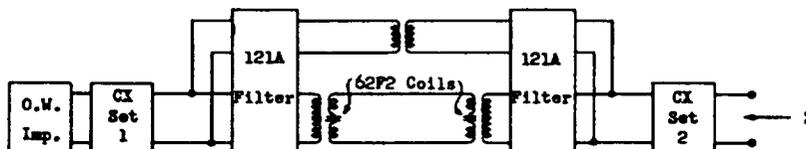


Intermediate Equipment Return Loss

121A FILTER

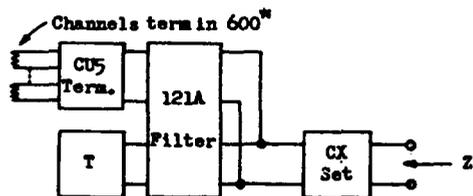


Freq.	Sides - No CX Sets						104 - 12" Phantoms					
	104 - 12"		128 - 12"		165 - 8"		No CX		CX on Sides			
	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.
200	864/42.7	18	761/34.1	22	624/24.0	28	635/31.8	27	1060/28.7	11		
300	659/34.9	16	633/26.6	20	563/15.5	26	536/25.8	33	740/34.1	14		
500	535/23.2	15	547/16.7	18	537/6.7	25	471/17.9	34	558/28.6	17		
1000	477/1.6	14	510/0.7	17	568/4.5	21	433/8.3	34	458/15.9	23		
1500	540/11.1	14	567/9.5	16	636/7.7	18	426/2.6	28	424/7.7	35		
2000	695/16.8	14	680/10.7	17	677/4.2	19	415/3.5	22	407/1.8	31		
2200	733/10.2	16	709/7.9	18	674/2.4	19	412/5.7	20	402/0	28		
2500	746/3.6	20	716/3.8	21	635/1.5	22	413/8.8	18	401/6.7	20		
2900	635/0	27	610/1.7	26	663/4.8	19	420/17.7	15	399/13.2	17		
3000	584/0	23	578/3.8	22	550/7.8	21	426/20.8	14	399/16.5	15		
3200	516/6.7	16	526/8.7	17	543/15.1	17	432/24.7	12	412/23.0	13		



Freq.	SIDES													
	104 - 12" Spacing				128 - 12" Spacing				165 - 8" Spacing					
	No CX		CX 1 and 2		No CX		CX 1 and 2		No CX		CX 1		CX 1 and 2	
Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	
200	-	-	-	-	-	-	-	916/10.6	9	-	-	-	-	
300	979/14.6	19	1741/29.2	10	928/7.8	15	1578/31.9	9	820/1.8	14	978/24.5	13	1277/38.1	8
500	664/16.2	22	790/12.8	14	703/13.1	32	783/40.0	13	743/6.5	18	589/14.3	32	739/34.4	13
1000	614/9.5	24	685/14.9	32	613/11.9	28	690/17.0	22	625/16.9	19	686/10.6	19	738/20.4	15
1500	462/11.8	14	515/27.3	13	458/10.7	15	500/24.5	14	420/9.0	16	420/15.6	15	456/24.5	14
2000	424/20.2	10	387/11.2	10	435/18.5	11	400/10.8	11	477/20.0	13	463/24.2	12	438/15.0	14
2200	552/28.5	10	527/23.1	11	551/26.8	11	544/22.4	12	582/23.8	13	618/26.5	11	581/20.9	13
2500	848/17.2	13	875/12.4	14	815/16.9	13	864/9.4	15	769/14.2	13	823/12.1	13	814/6.6	14
2900	711/2.9	28	657/9.6	27	713/1.5	25	672/7.8	26	717/0	18	672/0	20	667/3.1	21
3000	617/3.5	29	589/7.3	24	643/1.7	37	606/5.4	30	679/1.6	20	637/3.4	21	627/3.5	24
3200	-	-	-	-	562/2.0	23	554/0	23	610/1.2	25	-	-	590/0	29

- Notes: 1. Impedances, Z, were measured on typical installations terminated in precision open wire networks.
2. The return losses are between impedance Z and the characteristic impedance of the open wire indicated.
3. See Section 352-153-100 for description and uses of the 121A filter.



SIDES

T-	104-12" (No CX)		128-12" (No CX)		165-8" (No CX)		22A1 + 93A2 Coil (No CX)			22A1 + 62F2 Coil (No CX)			22A1 + 62F2 Coil With CX		
	Freq.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L. vs 104 128 165	Z	R.L. vs 104 128 165	Z	R.L. vs 104 128 165		
200	851/43.4	18	760/34.5	22	632/25.5	29	644/10.1	10 13 19	541/22.5	4 6 7	802/42.6	17 19 15			
300	659/36.6	15	630/27.2	19	565/17.3	27	712/4.6	13 16 18	689/19.2	7 8 9	687/16.0	16 22 25			
500	529/24.9	14	541/18.6	18	533/8.5	26	740/12.0	22 26 19	782/4.4	13 15 14	821/12.8	22 21 15			
1000	459/5.5	13	491/3.6	16	547/1.4	24	539/16.9	18 19 20	627/8.6	25 36 25	654/20.2	22 20 17			
1500	506/8.5	14	523/6.3	16	587/4.6	22	436/2.5	13 14 18	556/4.9	20 23 40	584/13.1	22 22 22			
2000	628/11.6	15	621/10.5	17	623/3.5	22	507/18.8	12 13 14	505/2.8	16 18 23	517/7.0	18 19 26			
2200	684/10.5	16	657/8.5	18	626/2.6	22	583/19.4	13 14 14	505/9.5	14 16 19	500/0	17 19 24			
2500	718/3.7	22	683/5.3	21	608/1.5	25	635/1.4	24 27 22	582/20.5	12 13 14	551/11.5	15 16 18			
2900	612/1.0	25	605/1.0	29	553/5.7	23	930/0	15 15 12	898/7.0	15 14 12	882/3.5	16 15 13			
3000	570/1.0	21	570/1.8	23	539/8.0	21	876/16.2	15 14 12	843/5.1	19 17 14	835/7.8	19 17 14			
3200	493/4.7	15	508/6.8	17	-	-	-	-	-	-	539/15.2	17 18 20			

PHANTOMS

T-	104-12" (No CX)		104-12" (CX on Sides)		128-12" (No CX)		128-12" (CX on Sides)		22A1 + 62G2 Coil (No CX)			22A1 + 62G2 Coil (CX on Sides)		
	Freq.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L.	Z	R.L. vs 104 128 165	Z	R.L. vs 104 128 165	
200	640/32.4	26	1095/24.1	10	532/26.1	29	916/29.2	11	284/18.1	5 6 8	448/42.8	15 16 13		
300	535/25.7	33	746/32.4	14	472/18.6	32	648/31.3	14	316/18.4	7 8 10	333/20.9	13 17 20		
500	471/18.0	34	560/27.1	18	440/12.0	31	504/23.9	17	359/16.3	10 11 13	347/5.1	15 19 26		
1000	433/8.3	34	461/15.0	24	420/5.2	31	435/12.5	24	391/12.1	14 16 17	383/2.8	19 21 24		
1500	421/2.6	29	432/8.8	31	410/0	27	411/3.9	35	396/12.4	16 17 17	389/5.6	19 21 22		
2000	415/3.5	22	414/1.8	31	407/5.4	22	405/0	30	392/16.8	15 15 16	380/11.4	16 19 19		
2200	413/5.7	21	410/0	28	406/7.8	20	402/0	31	381/19.0	14 14 15	376/17.2	14 15 16		
2500	410/8.8	18	404/4.4	22	411/13.2	16	402/6.7	22	412/29.7	10 11 11	419/26.6	11 12 12		
2900	420/17.8	15	410/12.8	16	412/18.1	14	405/15.6	16	579/28.2	10 10 9	571/24.5	11 11 10		
3000	427/20.7	14	412/15.9	15	418/21.2	13	410/18.8	15	610/25.6	10 10 9	592/20.4	11 12 11		
3200	434/24.6	12	425/22.3	13	-	-	417/22.7	13	601/19.6	11 11 10	569/14.3	13 13 12		