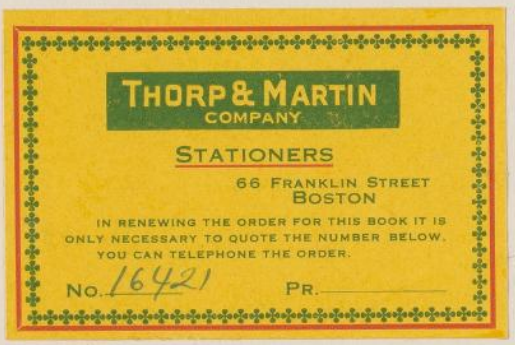
1933phae.proj.1292

PTM
KG
11366
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BK. 93 RH

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RH 4572 -P 88

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2

Cont. from Book 90, Page 154

17.2 RH 4871 March 8, 1933 Time.

Strip	Star	y	x	Diff	Diff	Cl	Dk.	Vol.
	1s	1960	918	725	—	2027	752	487
	1	2290	1085	780	—	2057	770	
	2	—	—	921	—	1990	742	
	3	—	—	955	—	2032	758	
	4	—	—	955	—	2150	790	
	5	—	—	1042	—	2070	788	
	6	—	—	1207	—	2152	798	
	7	—	—	1252	—	2182	820	
	8	—	—	1632	—	2148	802	
17.2	~~1733~~ 59	1733	547	1810	1778	2035	807	
	60	1730	579	1388	1373	2062	833	
	61	1719	589	1679	1663	2035	830	
	62	1738	612	1674	1675	2103	845	
	63	1730	622	1438	1448	2110	828	
	64	1729	938	1552	1492	2127	820	
	65	1730	1034	1622	1700	2133	829	
	66	1739	1235	1263	1293	2150	830	
17.4	67	1753	685	1531	1450	2115	832	
	68	1748	708	1700	1700	2126	865	
	69	1748	935	1398	1430	2150	868	
		~~1746~~	~~980~~					
	1S	1960	920	895	—	2190	882	
	1	2291	1086	1000	—	2212	935	
	2	—	—	1125	—	2187	865	
	3	—	—	1115	—	2153	873	
	4	—	—	1070	—	2257	867	
	5	—	—	1198	—	2218	867	
	6	—	—	1342	—	2205	867	
	7	—	—	1355	—	2302	897	
	8	—	—	1850	—	2208	928	485

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C-Ok	Def-Ok.	Rel Def	Mag.
1275			
1287	10	8	
1248	179	143	
1280	187	146	
1360	165	121	
1282	254	198	
1354	409	302	
1362	432	317	
1346	830	617	
1228	~~1003~~ 983	801	off curve
1229	~~555~~ 547	445	764
1205	841	698	840
1258	830	678	835
1282	615	480	776
1317	702	534	792
1304	832	638	822
1320	448	340	728
1283	658	516	788
1261	835	662	831
1282	546	426	758
1308	13	10	
1377	65	47	
1322	260	197	
1280	242	189	
1390	203	146	
1351	331	245	
1338	475	355	
1405	458	326	
1280	922	720	

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4

RH 4871 March 9, 1933 gmz

Strip	Stn	y	x	Defl	Defl	Cl	Dk.	Volt
	1 S	1961	878	624	—	1948	622	5.18
	1	2291	1054	658	—	2002	640	
	2	—	—	729	—	1930	637	
	3	—	—	787	—	1865	662	
	4	—	—	798	—	2087	668	
	5	—	—	1003	—	1985	710	
	6	—	—	1153	—	2093	700	
	7	—	—	~~1156~~ 1225	—	2150	718	
	8	—	—	1537	—	2070	755	
21 P								
17.6	70 X	1778	557	1710	1662	2148	832	
	71 X	1773	632	1802	1872	2172	769	
17.8	72 ✓	1781	442	1638	1778	2108	803	
	73 ✓	1783	726	1642	1652	2093	764	
	74 ✓	1792	1162	1782	1778	2218	803	
	75 ✓	1782	1368	1750	1698	2272	772	
18.0	76 ✓	1810	491	1592	1423	2084	752	
	77 ✓	1799	508	1468	1458	2083	753	
	78 ✓	1800	568	1637	1592	2118	758	
	79 ✓	1811	562	1142	1058	2092	762	
	80 ✓	1803	723	1718	1621	1979	746	
	81 ✓	1799	747	1624	1622	2067	749	
	82 ✓	1804	768	1498	1527	2113	733	
	83 ✓	1800	788	942	952	2096	713	
	84 ✓	1811	1092	1480	1402	2192	748	
	85 ✓	1814	1231	1312	1360	2179	743	
	86 ✓	1803	1228	1673	1682	2273	753	
	87 ✓	1811	1368	1530	1523	2227	721	
18.2	88 ✓	1822	512	1422	1412	2138	803	
	89 ✓	1818	802	1742	1680	2162	810	
	90 ✓	1829	803	1562	1608	2137	758	

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Cl-Dk	Def-Dk	Red. Def.	Mag.
1324	2	2	—
~~1344~~ 1362	~~[illegible]~~ 18	13	—
~~1201~~ 1393	~~[illegible]~~ 92	66	—
~~1078~~ 1203	125	104	—
~~1289~~ 1419	130	92	—
~~1419~~ 1275	293	250	—
~~1275~~ 1393	453	325	—
1432	507	354	—
1315	782	595	—
1316	854	649	851 ✗
1403	1068	760	off curve ✗
1305	905	693	off curve ↙
1329	883	665	off curve ↙
1415	977	690	off curve ↙
1500	952	636	846 ↙
1332	~~7~~55	567	815 ↙
1330	710	534	802 ↙
1440	856	594	825 ↙
1330	338	254	665 ↙
1233	923	750	off curve ↙
1318	874	653	853 (off curve) ↙
1380	779	565	814 ↙
1383	234	~~310~~169	~~703~~608 ↙ Possible error?
1444	693	480	782 ↙
1436	593	413	756 ↙
1520	924	608	832 ↙
1506	805	541	806 ↙
1335	614	460	775 ↙
1352	901	666	off curve ↙
1385	827	597	828 ↙

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ZC - RA 4871 - March 9, 1933

Strip	Star	Y	X	Dyl	Dyl	Cc	Dk	Tot
	91	1831	951	1567	1538	2158	773	
	92	1828	1127	1150	1142	2258	822	
	93	1837	1210	1522	1529	2258	782	
	94	1819	1912	1208	1133	2313	772	
18.4	95	1853	460	1062	1630	2093	753	
	96	1843	808	1532	1452	2177	782	
	97	1851	874	1743	1703	2197	757	
	98	1851	898	1124	1093	2212	754	
	99	1848	1382	1606	1608	2392	747	
18.6	100	1870	686	1522	1458	2128	773	
	101	1861	897	1320	1313	2178	703	
	102	1871	1367	1713	1668	2208	736	
18.8	103	1891	819	1732	1718	2110	723	
	104	1880	1083	1492	1419	2208	751	
19.0	105	1903	430	1492	1529	2123	797	
	106	1910	469	1657	1673	2092	719	
	107	1903	783	1732	1773	2148	793	570
	108	1911	874	1372	1342	2178	743	
	109	1909	909	1857	1833	2204	752	
	110	1911	1090	1613	1658	2242	803	
	111	1901	1264	1243	1300	2300	830	
19.2	112	1922	1392	1353	1362	2352	823	
	113	1931	1467	1532	1448	2254	832	
19.4	114	1851	732	1867	1852	2222	843	
	115	1941	947	1793	1782	2252	873	
	116	1951	967	1751	1760	2230	857	
	117	1950	1141	1912	2019	2307	832	
	118	1907	1226	1938	1888	2152	863	
	119	1950	1250	1472	1462	2352	862	
19.6	120	1962	619	1392	1393	2203	858	

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1933phae.proj.1792

cl. - Dk.	Defl. - Dk.	Red. Defl.	Mag.
1385	779	562	812
1436	324	226	646
1476	643	435	767
1541	411	267	672
1340	843	614	834
1395	710	504	793
1440	991	688	off curve
1458	355	244	659
1546	860	556	811
1355	717	530	801
1425	563	395	748
1472	854	580	820
1387	999	720	off curve
1457	704	483	782
1326	614	463	778
1373	946	689	off curve
1355	955	705	off curve
1435	614	428	762
1452	1093	754	off curve
1439	832	578	818
1470	441	305	695
1529	534	349	725
1422	658	463	778
1379	1016	737	off curve
1379	914	663	off curve
1379	904	655	856
1415	1133	769	off curve
1289	1050	820	off curve
1490	805	540	805
1345	534	397	748

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1933phae.proj.11921

8

KP – RH 4871 – March 9, 1933

Strip	Star	y	x	Dyl	Dyl	Cc	Dk	Volts.
	121	1975	650	1788	1893	2254	882	
	122	1971	842	1777	1790	2201	852	
	123	1971	1108	1848	1773	2332	858	
	124	1969	1409	1842	1768	2418	878	
19.8	125	1990	368	1812	1822	2262	919	
	126	1991	407	1847	1849	2277	914	
	127	1983	737	1897	1802	2242	883	
	128	1981	1050	1622	1679	2303	900	
	129	1997	1119	1503	1473	2328	903	
20.0	130	2001	588	1728	1748	2278	873	
	131	2011	763	1812	1818	2258	868	
	132	~~1998~~ 2011	1404	1709	1722	2353	882	
	133	2009	1493	1807	1772	2372	921	
20.2	134	2031	493	940	915	2127	860	5.18
	135	2028	1210	1447	1370	2263	730	
	136	2032	1368	1642	1732	2220	703	
	137	2030	1398	1760	1730	2252	681	
	138	2020	1430	1483	1497	2253	685	
20.4	139	2056	532	1556	1522	2022	673	
	140	2052	1015	1665	1657	2187	673	
	141	2057	1430	1635	1652	2268	655	
20.6	142	2060	448	~~1712~~	1608	1986	658	
	143	2062	471	1118	1103	2060	665	
	144	2073	759	1540	1542	2050	670	
	145	2070	930	1264	1261	2015	658	
	146	2067	1122	1322	1388	2072	670	
	147	2077	1254	682	678	2080	650	
20.8	148	2090	470	1360	1380	2040	662	
	149	2089	529	1688	1832	2077	673	
	150	2098	640	1530	1502	2025	663	

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cl.-Dk.	Defl.-Dk.	Red. Defl.	Mag.	
1372	958	697	off curve	
1349	932	692	off curve	
1474	952	635	845	
1540	927	602	830	
1343	898	667	off curve	
1363	834	685	off curve	
1359	967	712	off curve	
1403	748	533	802	
1420	585	412	758	
1405	865	616	835	
1390	947	681	off curve	
1471	834	566	814	
1451	893	615	837	Outside circle
1261	~~64~~ 67	~~514~~ 53	~~500~~ 498	?
1533	678	442	770	
1517	984	649	850	
1571	1064	679	off curve	
1568	805	514	797	
1349	866	643	846	
1514	978	645	849	
1413	989	700	off curve	
1328	1004	758	off curve	
1395	445	319	706	
1380	871	632	845	
1357	604	445	~~770~~	
1402	685	488	785	
1430	30	21	440	
1378	708	514	798	
1404	1087	774	off curve	
1362	853	626	841	

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10 RH 4871 gmc 3-9-33

Strip	Star	y	x	Dpl.	Dpl	Cl	Dla	Var.
	151	2078	833	1150	1140	2082	679	
	152	2094	842	1294	1310	2127	650	
	153	2080	875	1420	1437	2062	654	
	154 X	2092	878	1758	1618	2100	674	
	155	2089	973	1660	1610	2100	663	
	156	2096	1436	1640	1615	2258	670	
21.0	157	2109	460	1660	1616	2013	685	
	158	2112	600	1700	1633	2058	655	
	159	2102	752	1562	1542	1993	680	
	160	2109	1100	1157	1100	2200	650	
	161	2114	1160	1627	1650	2218	670	
	162	2099	1218	1304	1310	2204	663	
	163	2118	1292	1218	1230	2228	660	
	164	2109	1351	1542	1568	2190	660	
21.2	165	2123	478	1360	1360	2032	653	
	166	2138	659	1618	1618	2162	662	
	167	2125	1047	1230	1250	2163	~~660~~	
	168	2120	1147	1540	1623	2260	680	
	169 X	2130	1237	1680	1673	2146	690	
	170	2120	1445	1686	1673	2243	710	
21.4	171	2150	513	1705	1750	2100	700	
	172	2148	582	1633	1630	2082	712	
	173	2150	613	1580	1637	2020	700	
	174	2148	638	1470	1442	2073	680	
	175 X	2141	928	1660	1654	2175	690	
	176	~~2149~~	~~978~~					
	176	2146	1388	1090	1120	2270	701	
	177 X	2157	1447	1560	1578	2220	680	
	15	1460	877	698	—	2092	712	
	1	2292	1042	730	—	2071	703	

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Cl.-Dk.	Defl.-Dk.	Red. Defl.	Mag.
1403	466	337	713 ←
1477	652	441	769 ←
1408	774	552	810 ←
1426	1014	713	off curve X
1437	972	677	off curve ←
1588	958	605	831 ←
1328	953	718	off curve ←
1403	1011	721	off curve ←
1313	872	664	861 (off curve) ←
1550	478	308	699 ←
1548	968	626	842 ←
1541	644	417	758 ←
1568	564	359	729 ←
1530	895	585	822 ←
1379	707	513	797 ←
1500	956	638	847 ←
1503	580	386	745 ←
1580	902	590	817 ←
1456	1086	747	off curve X
1533	970	633	841 ←
1400	1028	735	off curve ←
1370	920	671	off curve ←
1320	878	665	off curve (861) ←
1393	781	561	813 ←
1485	967	651	852 X
1569	404	257	866 ←
1540	889	577	820 X Under the line
1390	~~95~~	—	—
1368	27	20	

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12

RH 4871 jmc 3-9-33.

Strip	Star	dy	x	Diff	Diff	cl	Cle	Volt
	2	—	—	842	—	2092	690	
	3	—	—	880	—	2010	688	
	4	—	—	930	—	2070	684	
	5	—	—	1038	—	2058	690	
	6	—	—	1178	—	2143	670	
	7	—	—	1233	—	2153	680	
	8	—	—	1603	—	2113	691	5.05

jmc 3-13-33

	1s	1960	805	1712	[illegible]	2751	1667
	1	2290	1063	1112	—	2602	1088
	2	[illegible]	[illegible]	1170	—	2470	1050
	3	—	—	1198	—	2388	1047
	4	—	—	1184	—	2556	1060
	5	—	—	1287	—	2452	1163
	6	—	—	1448	—	2532	1066
	7	—	—	1478	—	2518	1040
	8	—	—	1875	—	2526	1026
21.6		2151	471	2330	2285	2590	1452
		2160	495	[illegible]	1743	2556	1880
		2156	656	2180	2375	2650	2153
		2160	448	2066	2018	2505	1358
		2170	450	1930	1705	2350	1020
		2175	568	1758	1748	2380	948
		2168	606	1885	1860	2402	1005

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Cl.-Dk.	Def-Ok	Rd Def.
1402	152	108
1322	192	145
1386	246	179
1368	348	255
1473	508	346
1473	553	375
1422	912	641

REJECT

} Reject - irregular Dark readings.

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1993phae.proj.1792

14

2P - C H 4871 - March 15, 1933.

Strip	Star	y	x	dyff	dxff	cc	dk	Palt
	11	1961	911	1127	—	2247	1123	510
	1	2292	1078	1187	—	2298	1122	
	2	—	—	1243	—	2278	1123	
	3	—	—	1268	—	2273	1093	
	4	—	—	1287	—	2361	1122	
	5	—	—	1318	—	2258	1111	
	6	—	—	1447	—	2312	1114	
	7	—	—	1483	—	2342	1110	
	8	—	—	1823	—	2341	1113	
21.6	178	2160	460	1893	~~1978~~	2210	1113	
	179	2170	462	1567	1646	2220	1091	
	180	2168	481	1952	2010	2187	1061	
	181	2170	618	1809	1872	2222	1049	
	182	2169	702	1923	1823	2208	1063	
	183	2162	837	1948	1912	2280	1068	
	184	2160	848	1828	1878	2258	1062	
	185	2172	941	1848	1812	2258	1062	
	186	2163	1094	1827	1343	2277	1052	
	187	2169	1100	1818	1813	2241	1062	
	188	2170	1179	2010	1943	2292	1057	
	189	2160	1482	1837	1822	2292	1053	
21.8	190	2197	458	1862	1914	2181	1048	
	191	2188	468	1892	1892	2238	1058	
	192	2177	582	1758	1742	2198	1052	
	193	2183	578	1818	1783	2197	1053	
	194	2180	1022	1092	1092	2279	1057	
	195	2190	1249	1583	1618	2303	1058	
	196	2179	1409	1992	1908	2312	1088	
22.0	197	2209	496	1909	1907	2257	1092	
	198	2213	718	1577	1608	2188	1075	

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1933phae.proj.1192

Cl. -Dk.	Defl. -Dk.	Red. Defl.	Mag.
1124	4	4	
1176	65	55	
1155	120	104	
1180	175	155	
1239	165	132	
1147	207	181	
1198	333	278	
1232	373	303	
1228	710	478	
1097	792	722	off curve ←
1129	515	456	802 ←
1126	920	818	off curve X
1173	791	675	off curve X
1145	810	708	off curve ←
1212	862	711	off curve ←
1196	791	662	off curve X
1196	768	644	off curve ←
1225	283	231	672 ←
1179	754	640	off curve ←
1235	919	744	off curve X
1239	777	628	off curve X Under the line
1133	840	748	off curve X
1180	834	708	off curve ←
1146	698	610	off curve ←
1144	747	652	off curve ←
1222	35	29	409 ←
1245	542	436	793 ←
1224	862	712	off curve X
1165	816	693	off curve X
1113	517	464	805 ←

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1933phae.proj.1292

DJP - RA 4871 — March 25, 1933

Strip	Star	y	x	dyfl	dyfl	Cc	Dk	Pat's
	199 ✓	2202	752	1418	1403	2238	1092	
	200 ✓	2200	762	1900	1977	2232	1062	
	201 ✓	2203	879	1852	1828	2287	1053	
	202 ✓	2210	983	1822	1908	2292	1043	
	203 ✓	2212	1247	1700	1654	2329	1053	
	204 ✓	2206	1379	1852	1787	2303	1042	
	205 X	2208	1382	1922	1922	2287	1043	
	206 X	2210	1390	2000	1963	2349	1063	
22.2	207 ✓	2220	601	1480	1563	2242	1093	
	208 X	2232	642	1930	1950	2252	1122	
	209 ✓	2221	770	1842	1880	2288	1122	
	210 ✓	2220	928	1768	1773	2347	1112	
	211 ✓	2231	972	1492	1468	2337	1104	
	212 ✓	2220	1252	1872	1819	2327	1116	
22.4	213 ✓	2250	463	1572	1563	2337	1122	
	214 ✓	2253	565	1440	1479	2257	1089	
	215 X	2258	1098	1669	1613	2352	1114	
	216 ✓	2250	1163	1542	1563	2342	1122	
22.6	217 X	2269	722	1982	1953	2317	1122	
	218 X	2263	1240	2150	2090	2368	1127	
	219 ✓	2270	1317	1227	1207	2340	1128	
22.8	220 ✓	2280	879	1382	1393	2292	1113	
	221 X	2280	981	1930	1872	2330	1108	
	222 ✓	2290	1153	1743	1823	2368	1107	
23.0	223 X	2312	659	1983	1950	2333	1123	
	224 ✓	2303	704	1392	1355	2352	1133	
	225 X	2311	792	1987	1909	2293	1135	
	226 X	2313	837	1847	1832	2317	1117	
	227 ✓	2312	969	1352	1352	2343	1132	
	228 X	2299	1043	2032	2060	2381	1145	

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Cl. Dk	Dafl. – Dk.	Red. Dafl.	Mag.
1146	318	278	706 ←
1170	876	749	off curve ←
1234	787	639	off curve ←
1249	822	658	off curve ←
1276	624	489	817 ←
1261	777	616	off curve ←
1244	879	706	off curve X
1286	918	715	off curve X
1149	428	373	763 ←
1130	818	724	off curve X
1166	739	636	off curve ←
1235	658	534	839 ←
1233	376	305	724 ←
1211	730	602	off curve ←
1215	445	366	760 ←
1168	370	317	730 ←
1238	542	438	794 X
1220	430	352	752 ←
1195	845	701	off curve X
1241	993	800	off curve X
1262	89	73	490 ←
1179	274	233	683 ←
1222	793	649	off curve X
1261	666	528	832 ←
1210	843	691	off curve X
1219	240	197	641 ←
1158	813	702	off curve X
1200	722	601	off curve X
1211	220	182	630 ←
1236	901	729	off curve X

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XP - RH 4871 - March 15, 1933.

Trip	Star	Y	X	Defl	Defl	cc	Dk	Volts
23.2	229	2390	907	1463	1600	2342	1137	
	230 X	2317	951	1850	1833	2317	1133	
	231 X	2329	1017	1842	1782	2342	1128	
	232	2390	1140	1980	1892	2357	1142	
	233 X	2320	1314	2018	2057	2364	1119	
	234 X	2331	1327	1951	2048	2382	1134	
	235 X	2330	1337	2021	1960	2340	1133	
23.4	236	2348	689	1868	1979	2368	1132	
	237	2351	742	1673	1657	2362	1103	
	238 X	2338	773	2040	2032	2387	1147	
	239 X	2337	887	2082	1918	2362	1132	
	240 X	2351	1043	1782	1710	2347	1137	
	241	2342	1229	1702	1713	2378	1127	
23.6	242	2359	789	1612	1652	2322	1152	
	243 X	2354	797	2049	1979	2320	1132	
	244	2356	902	1816	1893	2338	1132	
	245	2360	933	1787	1842	2332	1132	
	246 X	2371	929	1960	1962	2298	1113	
	247	2360	1014	1623	1645	2283	1100	
	248 X	2365	1209	2000	1909	2271	1103	
23.8	249 X	2391	647	2078	2119	2292	1078	
	250 X	2391	662	1905	1936	2296	1070	
	251	2390	1122	1443	1532	2341	1092	
24.0	252 X	2404	719	1983	1943	2220	1089	
	253 X	2397	816	1803	1793	2208	1060	
	254	2400	908	1738	1693	2253	1063	
	255	2402	957	1892	1803	2272	1063	
	256 X	2403	1007	1903	1847	2378	1068	
	257	2405	1101	1733	1710	2283	1047	
	258	2448	1264	1443	1504	2278	1049	

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Cl.-Dk	Degl.-Dk.	Red. Degl.	Mag.	
1205	344	286	710	
1184	708	597	off curve	
1214	684	563	850	
1215	792	652	off curve	
1245	918	737	off curve	
1248	868	695	off curve	
1207	851	710	off curve	← at this point the star is moves for no good reason to y = 1961, x = 929
1236	791	640	off curve	
1209	462	382	769	
1240	889	716	off curve	
1230	868	705	off curve	
1210	284	234	676	
1251	280	223	668	
1170	480	410	778	
1188	932	784	off curve	
1206	722	598	off curve	
1200	682	568	850	
1185	848	716	off curve	
1183	534	450	800	
1168	876	750	off curve	
1244	1020	870	off curve	
1226	815	713	off curve	
1249	395	316	730	
1131	849	749	off curve	
1245	760	610	off curve	
1190	652	548	842	
1209	834	690	off curve	
1310	807	616	off curve	
1236	374	303	723	
1229	99	81	501	

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HP - R.A. 4871 - March 15, 1933.

Strip	Star	y	x	Defl	Defl.	Ce. Dk.	Volts
24.2	259 X	2422	973	1900	1952	2270	1048
	260 ✓	2430	1259	1744	1756	2297	1053
	261 X	2420	1303	1792	1767	2306	1053
24.4	262 ✓	2442	740	1233	1248	2252	1053
	263 ✓	2442	783	1277	1306	2217	1053
	264 ✓	2450	820	1773	1733	2197	1042
	265 ✓	2451	909	1771	1808	2278	1053
	266 ✓	2451	1154	1536	1532	2312	1048
	267 ✓	2440	1238	1672	1692	2337	1057
24.6	268 X	2470	1152	1987	1968	2288	1058
24.8	269 ✓	2491	878	1063	1063	2267	1053
	270 ✓	2487	1139	1552	1512	2252	1034
	271 ✓	2482	1153	1520	1532	2283	1050
	272 ✓	2479	1186	1769	1819	2393	1052
25.0	273 X	2512	1072	1516	1533	2247	1051
25.2	274 ✓	2520	1118	1183	1182	2297	1043
25.4	275 X	2547	1049	1274	1267	2257	1042
	1A	1961	911	1043	—	2212	1048
	1	2292	1078	1106	—	2238	1054
Plate	2	—	—	1177	—	2237	1042
Irregular	3	—	—	1237	—	2279	1053
	4	—	—	1270	—	2342	1054
	5	—	—	1294	—	2239	1047
	6	—	—	1440	—	2292	1066
	7	—	—	1474	—	2332	1063
	8	—	—	1826	—	2309	1074

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α - Dk.	Dεfl. - Dk.	Red. Dεfl.	Magn.	
1222	878	717	off curve X	
1244	697	560	849 ✓	
1253	727	580	off curve X	
1199	187	156	602 ✓	
1164	239	205	650 ✓	
1155	711	615	off curve ✓	
1225	737	602	off curve ✓	
1264	486	384	770 ✓	
1280	625	488	816 ✓	
1230	920	748	off curve X	
1214	10	8	351 ✓	
1248	498	409	781 ✓	
1233	476	385	769 ✓	
1341	742	553	847 ✓	
1196	473	395	775 X	
1254	139	111	549 ✓	
1215	228	188	636 X	Under the line
1164	———	———	———	
1184	49	41	———	
1195	135	113	———	
1226	184	150	———	
1288	216	168	———	
1292	241	191	———	
1226	374	305	—	
1269	411	324	—	
1235	752	609	—	

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J. F. McJ. R.A. 4972 Mar 18, 1932

Strip	Star	Y	X	Defl	Defl.	Cl.	Wk	Volt	
	15	1960	868	1430	—	2596	1448		520
	1	2290	1032	1462	—	2622	1490		
	2	—	—	1552	—	2592	1490		
	3	—	—	1586	—	2600	1508		
	4	—	—	1600	—	2624	1504		
	5	—	—	1688	—	2612	1500		
	6	—	—	1852	—	2642	1510		
	7	—	—	1948	—	2690	1520		
	8	—	—	2257	—	2652	1492		
14.2	↙1	1430	838	2384	2368	2610	1500		
	↙2	1431	932	2342	2340	2622	1490		
14.4	↙3	1439	944	2292	2386	2570	1488		
	↙4	1449	1179	2380	2352	2628	1468		
14.6	↙5	1462	1098	2412	2428	2652	1472		
14.8	↙6	1476	760	1864	1918	2604	1460		
	↙7	1481	900	2346	2404	2618	1468		
	↙8	1481	1130	1930	1910	2622	1470		
	↙9	1482	1131	2038	2040	2614	1480		
15.0	↙10	1494	760	2220	2172	2640	1480		
	↙11	1511	908	2080	2094	2610	1472		
	↙12	1508	1086	2322	2344	2610	1478		
15.2	↙13	1526	692	2250	2222	2604	1472		
	↙14	1519	928	2442	2438	2642	1484		
	↙15	1519	1046	2142	2180	2641	1478		
15.4	↙16	1550	556	2310	2280	2608	1478		
15.6	↙17	1560	542	2290	2292	2598	1480		
	↙18	1568	698	2278	2290	2620	1472		
	↙19	1560	972	2452	2426	2648	1480		
15.8	↙20	1589	531	2212	2208	2628	1490		
	↙21	1580	608	2070	2102	2610	1490		

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1933phae.proj.1192

Cl. Hr	Defl. Hr	Red. Defl.	Magn
1148	-18	—	—
1132	-38	—	—
1102	62	56	~~532~~
1092	18	713	—
1120	96	868	—
1112	188	169	—
1132	342	301	—
1170	428	366	—
1160	765	659	—
1110	876	889	off curve ✓
1132	851	751	off curve ✓
1082	851	785	off curve ✓
1160	898	774	off curve ✓
1180	948	804	off curve ✓
1144	431	377	745 ✓
1150	907	789	off curve ✓
1152	450	390	750 ✓
1134	559	502	787 ✓
1160	716	617	818 ✓
1138	665	541	798 ✓
1132	855	754	off curve ✓
1132	764	673	835 ✓
1158	956	825	off curve ✓
1163	683	586	805 ✓
1130	817	722	off curve ✓
1118	811	725	off curve ✓
1148	812	707	844 ✓
1168	959	820	off curve ✓
1138	720	632	823 ✓
1120	596	532	796 ✓

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J 7 McJ - R.A. 4872 - March 18, 1933.

Strip	Star	Y	X	Defl.	Defl.	Cl.	Dk	Volts.
	22	1591	151	2332	2278	2602	1364	
	23	1596	845	2206	2200	2480	1324	
	24	1580	1180	2068	2070	2492	1304	
	25	1590	1220	1688	1648	2452	1282	
16.0	26	1580	1268	1830	1802	2448	1244	
	27	1609	1157	2061	2103	2407	1223	
	28	1607	1177	1503	1532	2378	1207	
16.2	29	1630	531	1857	1886	2352	1203	
	30	1636	533	1562	1593	2307	1204	
	31	1616	549	1925	1923	2368	1227	
	32	1621	643	1828	1818	2367	1213	
	33	1627	848	2103	2130	2350	1193	
	34	1622	929	2092	2052	2348	1182	
	35	1631	1018	2003	1963	2400	1197	
	36	1631	1050	1718	1763	2361	1218	
16.4	37	1641	677	1933	1938	2307	1169	
	38	1649	992	2028	2006	2328	1162	
	39	1642	1167	1873	1849	2381	1190	
	40	1651	1228	2093	2132	2372	1193	
16.6	41	1666	463	1683	1667	2368	1203	
	42	1661	607	1762	1797	2357	1224	
	43	1668	671	1668	1662	2382	1222	
	44	1670	867	1668	1672	2396	1216	
	45	1662	942	1318	1322	2349	1202	
	46	1663	958	2073	2037	2268	1223	
	47	1668	1357	2043	2077	2408	1222	
16.8	48	1680	604	2050	2012	2296	1204	
	49	1683	630	1980	1965	2292	1192	
	50	1680	670	1192	1182	2281	1178	
	51	1680	752	1398	1403	2339	1172	

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1933phae.proj.1192

~~1248~~	Def.-Dk.	Red. Def.	Mag.	
1248	951	762	off curve	✓
1156	879	760	off curve	✓
1188	765	644	827	✓
1170	386	330	725	✓
1204	572	475	778	✓
1184	859	725	off curve	✓
1171	311	265	695	✓
1179	669	582	809	✓
1203	374	349	733	✓
1141	697	610	817	✓
1154	610	529	795	✓
1152	823	712	~~off~~ 847	✓
1161	890	767	off curve	✓
1203	786	653	~~874~~ 829	✓
1148	527	460	774	✓
1138	767	674	836	✓
1166	855	734	off curve	✓
1191	671	564	806	✓
1179	919	780	off curve	✓
1165	472	406	755	✓
1133	560	494	785	✓
1160	443	382	747	✓
1180	454	385	748	✓
1147	118	103	594	✓
1045	835	798	off curve	✓
1178	836	708	845	✓
1092	827	757	off curve	✓
1100	780	709	845	✓
1103	9	8	398	✓
1167	228.	196	659	✓

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1933phae.proj..1192

ZJP - RA 4872 - March 18, 1933

Strip	Star	y	x	Diff	Diff	Cc	Dk	Falts
	52	1688	949	1787	1806	2296	1152	
17.0	53	1702	987	1803	1802	2279	1162	
	54	1711	1224	1734	1829	2330	1143	
	55	1700	1363	1838	1856	2328	1145	
	56	1708	1378	1912	1972	2317	1130	
17.2	57	1731	527	1619	1650	2272	1150	
	58	1721	536	1963	1972	2242	1143	
	59	1731	568	1660	1728	2267	1134	
	60	1731	883	1753	1772	2292	1132	
	61	1732	980	1892	1890	2272	1128	
17.4	62	1737	792	2022	2048	2247	1128	
	63	1740	561	1912	1955	2208	1133	
	64	1757	631	1622	1627	2252	1124	
	65	1746	653	1943	1958	2248	1133	
	66	1750	881	1604	1622	2292	1132	
	67	1749	927	1992	1982	2258	1125	
	68	1739	1182	1468	1483	2306	1129	
	10	1960	868	1138	—	2295	1132	
	1	2290	1032	1164	—	2277	1142	v70
	2	—	—	1213	—	2292	1152	
	3	—	—	1253	—	2267	1147	
	4	—	—	1239	—	2306	1146	
	5	—	—	1332	—	2307	1143	
	6	—	—	1493	—	2293	1146	
	7	—	—	1552	—	2326	1153	
	8	—	—	1892	—	2246	1152	

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* Nos. 1 & 8 are to left of the pointers as plate is inverted

Cl –	Dk Defl –	Dk Rel Defl	Magn.	
1144	644	616	818	✓
1117	640	629	822	✓
1190	639	586	810	✓
1178	702	596	812	✓
1184	809	682	838	✓
1122	484	431	763	✓
1099	825	751	off curve	✓
1133	560	494	784	✓
1160	630	543	799	✓
1144	763	666	833	✓
1119	907	810	off curve	✓
1125	801	712	846	✓
1128	500	443	768	✓
1110	817	736	off curve	✓
1160	481	414	759	✓
1133	862	760	off curve	✓
1177	347	295	708	✓
1163	1	1	—	
1135	22	19	—	
1140	61	53	—	
1120	106	~~948~~ 95	—	
1160	93	80	—	
1164	189	162	—	
1147	347	302	—	
1173	399	340	—	
1094	740	675	—	

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1933phae.proj.1292

α Ψ - R.A. 4872 - March 19, 1933.

Strip	Star	Y	X	Dfl	Dfl	Cl	Dk	Volts.
	N	1960	827	1182	—	2072	1164	520
	1	2290	993	1173	—	2098	1181	
	2	—	—	1223	—	2096	1188	
	3	—	—	1272	—	2057	1178	
	4	—	—	1252	—	2112	1177	
	5	—	—	1322	—	2112	1174	
	6	—	—	1429	—	2079	1170	
	7	—	—	1508	—	2116	1192	
	8	—	—	1767	—	2128	1202	
17.8	✓69	1780	392	1818	1867	2072	1181	
	✓70	1796	407	1622	1583	2081	1192	
	✓71	1777	491	1873	1824	2082	1212	
	✓72	1781	672	1792	1773	2118	1207	
	✓73	1797	737	1238	1252	2148	1217	
	✓74	1790	1112	1925	1949	2157	1203	
	✓75	1780	1318	1873	1868	2172	1218	
18.0	✓76	1808	440	1841	1767	2147	1223	
	✓77	1798	517	1798	1832	2132	1222	
	✓78	1810	511	1342	1342	2116	1210	
	✓79	1800	592	1799	1892	2099	1204	
	✓80	1800	672	1843	1833	2108	1176	
	✓81	1795	697	1733	1760	2112	1196	
	✓82	1801	719	1746	1783	2113	1210	
	✓83	1814	752	1813	1843	2152	1213	
	✓84	1809	1043	1683	1703	2150	1218	
	✓85	1800	1177	1938	1913	2176	1212	
	✓86	1811	1179	1702	1688	2170	1208	
	✓87	1813	1264	1462	1469	2182	1203	
	✓88	1810	1321	1813	1793	2172	1200	
18.2	✓89	1820	462	1584	1607	2142	1192	

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1933phae.proj.1292

Cl.-Dk.	mean Defl.-Dk	Red. Defl.	Magn.		
908	18	20	—		
917	-8		—		
905	35	38	—		
879	94	108	—		
936	75	801	—		
838	148	176	—		
909	259	285	—		
921	316	343	—		
926	565	612	—		
891	~~637~~ 661	~~668~~ 749	off curve	✓	
889	~~710~~ ~~636~~ 636	461	775	✓	
870	~~664~~ 664	730	off curve	✓	
911	~~575~~ ~~85~~ 575	631	832	✓	
929	26	28	505	✓	Possible error?
954	734	771	off curve	✓	
954	652	684	848	✓	
924	581	629	831	✓	
910	593	653	839	✓	
906	132	146	633	✓	
895	642	718	off curve	✓	
932	662	717	off curve	✓	
916	560	602	822	✓	
903	530	587	817	✓	
939	615	655	843	✓	
932	475	510	790	✓	
964	714	741	off curve	✓	
962	487	506	789	✓	
979	263	269	704	✓	
972	603	620	829	✓	
950	404	415	764	✓	

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1933phae.proj.1292

XP-RH 4872 - March 19, 1933

Strip	Star	y	x	Dyfl	Dxfl	Ce	Dk	Volts
	90	1836	471	1868	1919	2149	1212	
	91	1827	752	1742	1746	2142	1211	
	92	1831	900	1721	1742	2150	1223	
	93	1823	1074	1463	1453	2197	1225	
	94	1832	1163	1643	1656	2212	1223	
18.4	95	1851	411	1742	1723	2117	1232	
	96	1837	578	1910	1989	2172	1217	
	97	1841	756	1752	1607	2173	1222	
	98	1849	824	1888	1888	2178	1242	
	99	1849	848	1352	1349	2166	1237	
	100	1850	858	1959	1994	2169	1233	
	101	1842	1332	1908	1886	2228	1243	
18.6	102	1868	634	1605	1572	2178	1239	
	103	1860	847	1968	1968	2187	1238	
	104	1871	1317	1903	1909	2237	1242	
18.8	105	1890	767	1832	1906	2182	1251	
	106	1880	1032	1717	1692	2187	1252	
19.0	107	1903	379	1653	1725	2148	1253	
	108	1908	419	1782	1787	2168	1202	
	109	1901	732	1818	1818	2168	1252	
	110	1909	824	1463	1518	2179	1253	
	111	1905	909	1992	1882	2162	1233	
	112	1909	1041	1738	1762	2187	1232	
	113	1900	1217	1572	1600	2182	1242	
19.2	114	1920	1361	1652	1704	2242	1232	
19.4	115	1940	897	1825	1782	2193	1233	
	116	1949	1091	1982	1997	2207	1225	
	117	1950	1199	1680	1705	2220	1222	
	118	1941	1268	1970	1987	2178	1229	
19.6	119	1960	298	1944	1970	2138	1234	

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1933phae.proj.1292

Cl - Dk	mean Defl - Dk	Red. Defl.	Magn	
937	732	781	off curve	✓
931	533	594	819	✓
927	509	548	803	✓
972	233	240	689	✓
989	427	432	766	✓
985	500	508	790	✓
955	733	758	off curve	✓
961	458	482	781	✓
936	646	680	847	✓
929	114	123	614	✓
936	7424	794	off curve	✓
985	654	664	842	✓
934	~~346~~	~~363~~	~~746~~	✓
949	330	348	739	✓
995	714	718	off curve	✓
931	616	662	842	✓
835	456	596	819	✓
996	436	438	768	✓
916	532	580	814	✓
916	566	618	828	✓
926	238	251	699	✓
929	704	758	off curve	✓
955	516	540	800	✓
940	344	366	744	✓
1010	446	442	770	✓
960	570	594	819	✓
982	764	778	off curve	✓
998	470	471	779	✓
949	750	802	off curve	✓
904	723	801	off curve	✓

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1933phae.proj.1292

J. Mc J. R.N. 4872 Mar. 19, 1932.

Strip	Star	y	x	Defl.	Defl.	Cl.	Hg.	Volts.
	T20	1961	568	1492	1510	2159	1223	
	121	1972	600	1768	1778	2118	1174	
	122	1960	692	1910	1892	2100	1150	
	123	1968	971	1888	1892	2108	1152	
	124	1970	1058	1772	1752	2132	1162	
	125	1962	1319	1928	1926	2130	1163	
	126	1968	1359	1803	1800	2156	1142	
19.8	127	1984	284	1851	1858	2084	1132	
	128	1992	296	1620	1624	2068	1152	
	129	1990	318	1742	1730	2072	1158	
	130	1990	348	1808	1748	2070	1160	
	131	1990	510	1872	1870	2084	1156	
	132	1988	512	1832	1858	2080	1154	
	133	1979	662	1819	1820	2086	1148	
	134	1981	686	1748	1766	2088	1148	
	135	1980	999	1622	1644	2100	1146	
	136	1993	1069	1538	1568	2134	1168	
	137	1986	1322	1928	1932	2142	1170	
	13	1960	828	1162	—	2064	1160	
	1	2290	991	1184	—	2100	1179	
	2	—	—	~~1253~~ 1212	—	2098	1182	
	3	—	—	1253	—	2096	1180	
	4	—	—	1252	—	2098	1172	
	5	—	—	1322	—	2110	1170	
	6	—	—	1442	—	2112	1158	
	7	—	—	1474	—	2152	1160	
	8	—	—	1770	—	2110	1168	

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1933phae.proj.1792

Cl - Dk	mean Deff - Dk	Red. Defl.	Magn	
936	278	297	717	✓
944	599	635	834	✓
950	751	791	off curve	✓
956	738	772	off curve	✓
970	600	619	828	✓
967	764	790	off curve	✓
1014	660	650	839	✓
952	712	748	off curve	✓
916	470	513	791	✓
914	578	633	833	✓
910	618	680	847	✓
928	715	770	off curve	✓
926	691	747	off curve	✓
938	672	717	off curve	✓
940	609	648	838	✓
854	487	570	810	✓
966	385	399	755	✓
972	760	782	off curve	✓
904	02	02	—	
921	05	05	—	
916	30	33	—	
916	73	80	—	
926	80	86	—	
940	152	163	—	
954	284	293	—	
992	314	316	—	
942	602	640	—	

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1993phae.proj.1292

D.J.P. – R.A. 4872 – March 20, 1933.

Strip	Star	y	x	Dspl	Dspl	Ce	Dk	Volts
	1A	1960	827	1117	—	1997	1130	
	1	2290	991	1140	—	2042	1130	
J.McJ.	2	—	—	1170	—	2050	1122	
	3	—	—	1200	—	2048	1130	
	4	—	—	1220	—	2070	1158	
	5	—	—	1312	—	2090	1172	
	6	—	—	1438	—	2110	1170	
	7	—	—	1494	—	2120	1170	
	8	—	—	1748	—	2098	1168	
20.0	138	2010	280	1748	1796	2068	1156	
	139	2002	539	1664	1642	2072	1156	
	140	2011	712	1732	1718	2072	1168	
	141	1998	1131	1568	1542	2098	1150	
	142	2010	1238	1980	1940	2208	1188	
	143	2010	1353	1886	1802	2210	1162	
20.2	144	2028	378	1878	1921	2062	1180	
	145	2030	474	1940	1900	2092	1190	
	146	2028	729	1942	1928	2112	1188	
	147	2024	868	1892	1900	2138	1204	
	148	2028	1037	1932	1870	2122	1200	
	149	2028	1160	1638	1640	2158	1210	
	150	2029	1349	1928	1912	2172	1198	
	151	2019	1380	1790	1758	2152	1212	
20.4	152	2040	442	1728	1682	2088	1208	
	153	2038	443	1208	1218	2152	1204	
	154	2050	942	1970	2018	2118	1198	
	155	2051	964	1878	1882	2162	1210	
	156	2052	1370	1938	1940	2180	1230	
20.6	157	2060	409	1832	1862	2130	1238	
	158	2062	432	1348	1336	2142	1224	

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1933phae.proj.1792

C1 - Dk	Left - Dk	Red - Left	Mag		
867	-13	—	—		
912	10	11	—		
928	48	62	—		
918	70	76	—		
912	62	68	—		
918	140	153	—		
940	268	286	—		
960	324	341	—		
930	580	622	—		
912	606	662	840	✓	
916	497	543	800	✓	
904	557	616	825	✓	
948	405	428	759	✓	
1020	772	760	off curve	✓	
1048	684	651	837	✓	
982	720	732	off curve	✓	
902	730	810	off curve	✓	
924	746	808	off curve	✓	
934	692	740	off curve	✓	
922	701	761	off curve	✓	
948	429	452	768	✓	
974	722	740	off curve	✓	
940	562	597	819	✓	
880	497	565	807	✓	
948	09	9	~~809~~ 811	✓	?
920	796	856	off curve	✓	
952	670	704	off curve	✓	
950	709	747	off curve	✓	
892	609	683	off curve	✓	
918	118	129	615	✓	

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1993phae.proj.1292

J 7 mcJ – CH 4872 – March 20, 1923.

Strip	Star	Y	X	Defl.	Defl.	Cl	Dk	Volts
	159	2057	480	1782	1734	2112	1220	
	160	2069	880	1542	1538	2134	1196	
	161	2062	1060	1970	1940	2162	1216	
	162	2060	1071	1598	1598	2110	1220	
	163	2078	1210	1236	1234	2152	1230	
20.8	164	2090	420	1630	1648	2148	1222	
	165	2096	479	1990	1938	2146	1204	
	166	2080	738	1952	1916	2088	1208	
	167	2079	782	1438	1448	2130	1212	
	168	2094	791	1668	1672	2140	1220	
	169	2080	826	1766	1768	2158	1208	
		~~2091~~	~~828~~	~~2038~~				
	170	2090	922	1904	1898	2248	1218	
	171	2080	1210	1870	1830	2198	1212	
	172	2092	1375	1919	1942	2218	1210	
21.0	173	2110	420	1802	1814	2092	1180	
	174	2112	650	1770	1778	2108	1180	
	175	2100	690	1750	1710	2060	1182	
	176	2101	700	1742	1750	2080	1188	
	177	2110	1050	1464	1452	2120	1190	
	178	2100	1169	1648	1656	2122	1180	
	179	2109	1301	1820	1820	2158	1190	
21.2	180	2126	430	1594	1564	2188	1182	
	181	2124	724	1902	1890	2102	1170	
	182	2124	998	1542	1536	2080	1168	
	183	2121	1079	1858	1850	2122	1162	
	184	2100	1098	1804	1750	2092	1148	
	185	2118	1110	1778	1790	2082	1140	
	186	2130	1188	1808	1880	2020	1138	
	187	2118	1241	1602	1564	2048	1148	

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1933phae.proj..1792

C1-DK	Left-Dk	Red-Left	Mag	
892	538	604	822	✓
938	344	367	738	✓
946	739	781	off curve	✓
890	378	425	758	✓
920	05	5	385	✓
926	417	450	767	✓
942	764	813	off curve	✓
880	726	825	off curve	✓
918	231	252	692	✓
920	425	462	771	✓
950	559	588	816	✓
1030	683	663	840	✓
986	638	647	835	✓
1008	720	714	off curve	✓
912	628	689	off curve	✓
928	594	640	833	✓
878	548	624	828	✓
892	558	626	829	✓
930	268	288	708	✓
942	472	501	784	✓
968	630	651	837	✓
1006	392	390	747	✓
932	726	780	off curve	✓
912	371	407	752	✓
960	692	721	off curve	✓
944	629	657	839	✓
942	644	683	off curve	✓
932	676	725	off curve	✓
900	435	483	778	✓

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1933phae.proj.1192

J Z mc J - CH 4872 - March 20, 1933

Strip	Star	y	x	Defl	Defl.	Cl.	Hk.	Volts.
	188	2130	1394	1812	1828	2092	1134	520
21.4	189	2100	522	1652	1692	2018	1132	
	190	2100	562	1712	1702	2018	1143	
	191	2100	588	1588	1612	2047	1150	
	192	2138	609	1708	1782	2042	1106	
	193	2147	1339	1512	1500	2108	1163	
21.6	194	2171	378	1528	1578	2050	1172	
	195	2162	373	1799	1850	2032	1164	
	196	2170	533	1782	1812	2057	1182	
	197	2169	617	1827	1823	2092	1178	
	198	2161	751	1919	1832	2038	1174	
	199	2171	854	1788	1757	2057	1172	
	200	2162	1010	1388	1364	2063	1173	
	201	2168	1016	1790	1815	2049	1180	
21.8	202	2190	381	1862	1843	2052	1183	
	203	2183	491	1708	1793	2082	1163	
	204	2177	496	1699	1703	2058	1183	
	205	2181	937	1212	1222	2088	1178	
	206	2189	1163	1666	1633	2128	1198	
22.0	207	2229	668	1708	1737	2072	1196	
	208	2200	677	1838	1823	2095	1202	
	209	2202	783	1772	1708	2106	1209	
	210	2210	898	1804	1786	2098	1192	
	211	2210	1059	1699	1713	2088	1198	
	212	2202	1293	1865	1832	2112	1203	
22.2	213	2220	653	1512	1482	2078	1208	
	214	2212	632	1610	1612	2072	1212	
	215	2220	688	1824	1809	2107	1208	
	216	2220	842	1773	1777	2112	1206	
	217	2229	888	1506	1492	2122	1196	

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1933phae.proj..1292

C/-Dk	Dfl-Dk	Red Dfl	May	
958	686	715	off curve	✓
886	540	610	823	✓
875	564	645	835	✓
894	447	500	783	✓
886	614	693	off curve	✓
945	343	363	735	✓
881	381	433	761	✓
868	562	647	836	✓
875	615	703	off curve	✓
914	647	708	off curve	✓
864	651	753	off curve	✓
885	600	678	848	✓
880	203	231	681	✓
869	622	716	off curve	✓
869	669	770	off curve	✓
919	612	665	841	✓
875	418	479	776	✓
9 10	39	43	510	✓
930	451	485	778	✓
876	251	286	707	✓
893	633	710	off curve	✓
897	556	620	827	✓
906	603	665	842	✓
890	508	571	811	✓
909	645	710	off curve	✓
870	289	332	723	✓
860	399	464	771	✓
899	608	676	845	✓
906	569	628	829	✓
926	303	328	722	✓

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1933phae.proj.1292

XP - RL 4872 - March 20, 1933.

Strip	Star	y	x	dyfl	dxfl	Cl	Dk	Volts
	218	2218	1168	1812	1767	2122	1212	
22.4	219	2250	378	1500	1487	2050	1172	
	220	2253	780	1443	1402	2068	1192	
	221	2250	1079	1569	1578	2074	1182	
22.6	222	2270	1291	1260	1257	2103	1193	
22.8	223	2279	793	1399	1383	2062	1203	
	224	2289	1069	1709	1679	2097	1187	
23.0	225	2303	618	1443	1417	2078	1196	
	226	2312	884	1378	1323	2056	1196	
23.2	227	2329	820	1503	1483	2093	1210	
	228	2331	1057	1792	1868	2074	1193	
23.4	229	2348	488	1782	1802	2092	1193	
	230	2350	643	1503	1506	2063	1186	
	231	2353	803	1767	1790	2100	1198	
	232	2340	1129	1425	1419	2066	1222	
23.6	233	2360	691	1093	1619	2053	1184	
	234	2358	834	1749	1838	2103	1201	
	235	2360	917	1662	1639	2043	1199	
23.8	236	2390	1022	1532	1608	2082	1222	
24.0	237	2400	809	1763	1750	2087	1214	
	238	2401	859	1883	1882	2098	1204	
	239	2412	1002	1518	1542	2086	1209	
24.2	240	2430	653	1448	1415	2072	1217	
	241	2427	1157	1776	1790	2122	1208	
24.4	242	2444	637	1362	1334	2064	1202	
	243	2443	680	1424	1394	2026	1204	
	244	2407	717	1872	1813	2082	1200	
	245	2450	804	1813	1803	2057	1212	
	246	2451	1050	1632	1648	2117	1203	
	247	2439	1132	1718	1678	2118	1190	

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1933phae.proj.1292

Cl-Dk	Left-Dk	Red-Left	Mag	
910	577	623	827	✓
878	321	365	737	✓
876	215	245	689	✓
892	391	438	762	✓
940	65	69	554	✓
859	188	219	673	✓
910	501	557	805	✓
882	219	248	690	✓
860	169	194	661	✓
883	283	320	720	✓
881	637	724	off curve	✓
899	599	667	842	✓
877	468	534	797	✓
902	580	644	835	✓
844	200	237	685	✓
869	422	486	779	✓
902	592	656	839	✓
844	451	534	797	✓
860	348	405	751	✓
873	~~538~~ 542	620	826	✓
894	678	758	off curve	✓
877	321	366	737	✓
855	214	250	691	✓
914	575	630	830	✓
862	149	173	650	✓
822 ~~824~~	255	311	718	✓
882	642	729	off curve	✓
845	596	705	off curve	✓
914	431	479	776	✓
928	608	655	838	✓

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1933phae.proj.1292

XP - RK 4872 - March 20, 1933.

Strip	Star	y	x	dyf	dyf	Cc	Dk	Volts
24.8	248	2493	773	1198	1192	2053	1177	
	249	2487	1036	1629	1612	2093	1192	
	250	2480	1050	1607	1607	2057	1195	
	251	2479	1081	1804	1793	2113	1183	
25.2	252	2521	1013	1311	1282	2108	1204	
	1	1960	827	1201	—	2048	1213	
	1	2290	991	1233	—	2107	1212	
	2	—	—	1273	—	2092	1208	
Plate finished	3	—	—	1283	—	2062	1212	
	4	—	—	1289	—	2103	1218	
	5	—	—	1362	—	2087	1213	
	6	—	—	1002	—	2082	1207	
	7	—	—	1522	—	2103	1192	
	8	—	—	1763	—	2070	1183	515

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1933phae.proj.1292

Cl-Dk	Vefl-Vk.	Red. Vefl	Mag.	
876	18	21	452	✓
901	428	475	7754	✓
862	412	478	775	✓
930	615	661	840	✓
904	92	102	595	✓
835	~~12~~		—	
895	21	23	—	
884	65	73	—	
850	71	83	—	
895	71	80	—	
874	149	170	—	
875	295	336	—	
911	330	363	—	
887	580	651	—	

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1933phae.proj.1792

XP - R.A. 4890 — March 21, 1933.

Strip	Star	y	x	dyfl	dyfl	cc	dk	Volts
	1A	1990	852	1150	—	2083	1163	500
	1	2321	1021	1172	—	2088	1173	
	2	—	—	1200	—	2128	1167	
	3	—	—	1238	—	2092	1191	
	4	—	—	1268	—	2128	1178	
	5	—	—	1337	—	2123	1212	
	6	—	—	1566	—	2138	1214	
	7	—	—	1623	—	2142	1222	
	8	—	—	1941	—	2138	1229	
14.8	1	1487	722	1886	1854	2157	1241	
	2	1472	1090	1582	1588	2183	1237	
	3	1478	1092	1742	1752	2172	1228	
15.0	4	1503	868	1778	1782	2194	1243	
	5	1510	1008	1852	1863	2167	1248	
15.6	6	1571	1229	1762	1794	2198	1247	
15.8	7	1579	1183	1556	1559	2203	1244	
16.0	8	1610	604	1752	1778	2162	1242	
	9	1598	1138	1468	1471	2178	1228	
16.2	10	1632	637	1943	1927	2162	1243	
	11	1622	1011	1668	1682	2173	1242	
	12	1637	1128	1804	1847	2168	1228	
16.4	13	1652	569	1741	1756	2168	1234	
	14	1649	1137	1756	1683	2177	1222	
	15	1641	1319	1433	1443	2218	1232	
16.6	16	1670	567	1908	1963	2187	1222	
	17	1671	632	1221	1228	2166	1230	
	18	1671	713	1349	1364	2182	1229	
	19	1661	818	1968	1952	2162	1232	
~~16.8~~	1A	~~1990~~	~~852~~	~~1243~~	—	~~2167~~		
	1	~~2321~~	~~1021~~		—			

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1933phae.proj.1792

C.I - DK	Objective - Dk	Red Objective	Mag.	
920	-13	—	—	
915	-01	—	—	
961	33	34	—	
901	47	52	—	
950	90	95	—	
911	125	137	—	
924	352	382	—	
920	401	436	—	
909	712	782 ✓	—	
916	629 ~~320~~	697 ~~335~~	811 ✓	
946	348	368	718 ✓	
944	519	550	771 ✓	
951	537	565	774 ✓	
919	610	665	802 ✓	
951	531	558	723 ✓	
959	314	377	721 ✓	
920	523	569	776 ✓	
950	242	255	675 ✓	
919	692	753	826 ✓	
931	433	465	748 ✓	
940	598	636	793 ✓	
934	514	550	771 ✓	
965	498	522	763 ✓	
986	206	209	657 ✗	under circle in 4872
965	714	740	822 ✓	
933	-11	—	—	
953	127	133	621 ✓	
929	727	783	832 ✓	
—	—	—	—	

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1933phae.proj.1922

gone. RH 4890 March 21, 1933

Chip	Star	y	x	Dcl	Dcl	Cl	Dk	Vat	C
16.8	20	1695	557	2042	2046	2222	1223		
	21	1678	910	1808	1832	2193	1241		
	22	1693	948	1841	1888	2228	1254		
	23	1691	1324	1898	1948	2272	1260		
17.0	24	1711	497	2102	2092	2238	1248		
	25	1704	570	1583	1613	2263	1242		
	26	1708	593	1593	1612	2196	1215		
	27	1708	763	1788	1786	2177	1210		
	28	1707	835	1567	1584	2203	1232		
	29	1703	1186	1784	1790	2208	1223		
	30	1698	1337	2010	1988	2208	1230		
17.2	31	1721	487	1652	1673	2208	1228		
	32	1730	520	1994	2006	2204	1224		
	33	1721	529	1723	1773	2218	1229		
	34	1720	843	1843	1887	2182	1230		
	35	1721	940	1982	1960	2153	1207		
	36	1729	1141	1521	1517	2213	1217		
17.4	37	1747	591	1670	1680	2172	1232		
	38	1738	613	1980	2008	2202	1212		
	39	1739	841	1650	1680	2178	1218		
	40	1740	1390	1923	1903	2180	1226		
17.6	41	1768	492	2042	2048	2202	1242		
	42	1772	674	1932	1960	2198	1250		
	43	1770	1319	2040	2022	2228	1242		
	1s	1998	851	1251	—	2170	1238		
	1	2320	1020	1260	—	2201	1230		
	2	—	—	1283	—	2212	1237		
	3	—	—	1294	—	2178	1245		
	4	—	—	1350	—	2183	1238		

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1933phae.proj.1792

C1-DR	Defl Dk	Red Defl	Maj
999	821	823	842
—	—	—	—
952	519	608	787
974	610	626	791
1012	663	654	800
990	849	858	849
1021	356	348	710
975	387	397	727
967	577	597	783
971	344	352	712
986	564	573	777
978	774	792	834
980	434	443	743
980	726	792	834
989	519	525	764
952	635	667	803
946	764	808	838
996	302	303	694
950	443	467	748
990	782	790	834
960	447	466	748
954	687	720	818 on circle on 4872
960	803	837	844
948	696	735	821
986	789	800	836
932	13	14	—
971	30	31	—
975	46	47	—
933	49	52	—
945	112	118	—

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1933phae.proj.1792

gmc RH 4890 March 21, 1933

Strip.	Star	y	x	Defl	Defl	Cl	Ok	Volt.
	5	—	—	1401	—	2170	1222	
	6	—	—	1560	—	2172	1241	
	7	—	—	1640	—	2202	1230	
	8	—	—	1958	—	2162	1221	5.00
	~~26~~ - RH 4890 - March 22, 1933.							540
	12	1990	851	1137	—	2297	1152	
	1	2320	1021	1148	—	2287	1128	
	2	—	—	1173	—	2911	1132	
	3	—	—	1210	—	2262	1133	
	4	—	—	1221	—	2262	1126	
	5	—	—	1313	—	2292	1127	
	6	—	—	1532	—	2243	1137	
	7	—	—	1618	—	2282	1123	
	8 ✓	—	—	2042	—	2243	1127	
17.8	44 ✓	1788	459	1728	1803	2329	1124	
	45 ✓	1789	518	1988	2049	2348	1126	
	46 ✓	1791	594	2048	2037	2293	1128	
	47 ✓	1788	698	1990	1938	2288	1133	
	48 ✓	1796	721	1877	1882	2282	1132	
	49 ✓	1789	738	1178	1168	2262	1118	
18.0	50 ✓	1800	441	2050	2009	2350	1138	
	51 ✓	1811	463	1724	1717	2307	1133	
	52 ✓	1800	512	1292	1321	2304	1142	
	53 ✓	1801	1047	1878	1827	2259	1131	
	54 ✓	1804	1181	1828	1838	2300	1136	
	55 ✓	1810	1267	1498	1056	2302	1143	
	56 ✓	1800	1321	1969	1986	2304	1150	
18.2	57 ✓	1836	758	1763	1812	2312	1162	
	58 ✓	1821	902	1914	1922	2248	1154	
	59 ✓	1817	1076	1463	1463	2300	1153	

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1933phae.proj..1292

C1-DK	Dpl Dk	Rd Dpl	Imy.
948	179	189	—
931	319	343	—
972	410	421	—
941	737	781	—
			—
1145	15	13	—
1159	20	18	—
1179	41	35	—
1129	77	68	—
1139	98	86	—
1165	186	161	—
1106	395	355	—
1159	495	428	—
1116	915	818	—
1202	639	523	761
1225	895	730	811
1165	914	785	826
1155	831	719	809
1150	748	650	790
1144	55	48	532
1212	892	735	812
1174	587	499	754
1162	164	141	622
1128	721	638	788
1167	700	600	779
1159	384	331	701
1151	825	716	808
1150	626	544	766
1094	764	697	803
1147	310	270	680

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1933phae.proj.1292

XP - RA 4890 - March 22, 1933

Trip	Star	Y	X	dyf	dyf	Cc	Dk	Volts
	60	1827	1167	1722	1734	2322	1162	
18.4	61	1842	413	1968	1842	2329	1159	
	62	1840	848	1902	1913	2288	1151	
	63	1851	848	1636	1662	2288	1149	
18.6	64	1859	637	1662	1693	2304	1157	
	65	1871	1037	1843	1832	2290	1153	
18.8	66	1896	381	1790	1837	2329	1162	
	67	1891	1218	1633	1652	2287	1168	
	68	1886	1332	2052	2152	2313	1158	
19.0	69	1900	420	1966	2118	2308	1144	
	70	1900	826	1486	1468	2278	1149	
	71	1901	1042	1852	1942	2303	1162	
	72	1912	1343	1706	1728	2318	1167	
19.2	73	1931	898	1902	1943	2268	1167	
	74	1922	1418	1982	1977	2318	1152	
19.4	75	1954	569	1507	1504	2289	1166	
	76	1942	918	1998	1992	2268	1172	
	77	1941	1202	1837	1852	2274	1147	
19.6	78	1971	1000	1852	1982	2287	1153	
19.8	79	1992	539	1924	1993	2332	1164	
	80	1988	1070	1775	1739	2327	1152	
20.0	81	2001	727	2012	2002	2322	1162	
	82	2006	789	2063	2075	2307	1167	
	83	2001	1357	2052	2043	2322	1165	
	84	2011	1382	1988	2038	2327	1163	
20.2	85	2029	447	1158	1178	2332	1153	
	86	2019	1162	1832	1883	2300	1159	
20.4	87	2056	423	1298	1300	2322	1169	
	88	2048	482	1963	1968	2347	1176	
	89	2054	1072	1814	1734	2318	1164	

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1933phae..proj..1292

C1-Dk	Dpl Dk	Al Dpl	Mag
1160	566	488	751
1164	746	640	788
1137	167	147	626
1139	500	439	738
1147	521	454	744
1137	685	602	780
1167	652	559	770
1119	474	424	733
1156	944	817	836
1214	898	740	814
1129	328	290	686
1141	735	644	739
1151	573	498	753
1101	755	686	800
1166	828	710	806
1123	340	303	691
1096	823	751	817
1127	691	618	782
1134	764	673	797
1169	794	679	799
1175	605	515	759
1160	845	728	810
1140	912	792	829
1157	888	768	821
1164	850	730	811
1179	15	13	440
1141	699	612	782
1153	130	113	603
1171	790	674	797
1154	710	615	782

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1933phae.proj.1292

HJP - RH 4890 - March 22, 1933.

Strip	Star	Y	X	Defl	Defl	Ce	Dk	Volts
20.6	90	2070	782	1467	1472	2298	1170	
	91	2071	827	1933	1908	2300	1173	
	92	2060	881	1806	1737	2300	1166	
	93	2069	1211	1211	1211	2317	1173	
20.8	94	2081	422	1788	1806	2355	1168	
	95	2090	591	1963	1992	2297	1163	
	96	2088	792	1832	1798	2398	1178	
	97	2090	~~1120~~ 1130	2128	2062	2364	1172	
21.0	98	2100	420	2468	2350	2700	1190	
	99	2116	432	1928	2128	2812	1170	
	100	2104	552	2442	2412	2728	1172	
	101	2100	1052	1710	1740	2734	1164	
	102	2110	~~1127~~ 1117	2478	2450	2750	1168	
	103	2109	1111	2458	2452	2706	1160	
	104	2110	1244	1988	2120	2678	1160	
21.2	105	2130	610	2410	2402	2710	1148	
	106	2118	999	1930	1902	2654	1168	
21.4	107	2140	536	2412	2408	2722	1178	
	108	2140	590	2038	2084	2696	1172	
	109	2150	762	2398	2440	2692	1182	
	110	2138	1340	1842	1850	2810	1186	
	½	1990	861	1192	—	2690	1174	
	1	2300	1021	1208	—	2698	1182	
	2	—	—	1244	—	2728	1166	
	3	—	—	1304	—	2742	1178	
	4	—	—	1342	—	2712	1175	
	5	—	—	1472	—	2694	1186	
	6	—	—	1808	—	~~2336~~	1192	
	7	—	—	1908	—	2316	1156	
	8	—	—	1982	—	2288	1142	

2336 X

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1933phae.proj.1292

C1-DK	Dfl-Dk	Red Dfl	Mag
1128	300	266	677
1127	773	686	800
1134	606	535	764
1144	38	33	507
1187	629	530	762
1134	816	718	808
1250	667	534	764
1192	923	774	823
1610	1219	806	833
1642	858	522	761
1556	1255	806	833
1570	561	357	709
1582	1296	817	836
1546	1295	837	841
1518	894	589	776
1562	1258	805	833
1486	748	504	756
1544	1232	798	830
1523	889	584	775
1510	1231	819	836
1624	660	406	725
1516	18	12	—
1516	26	17	—
1562	78	49	—
1564	126	82	—
1537	167	108	—
1508	286	190	—
1144	616	537	—
1160	752	649	—
1146	850	738	—

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1933phae.proj.1292

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Dd ps - R.A. 4890 - March 22, 1933.
J.T. Moj -

Strip	Star	y	x	Dyll	Dyll	Cc	Dk	Volts
	1A	1990	951	1122	—	2042	1133	540
	1	2300	1021	1142	—	2067	1139	
	2	—	—	1158	—	2078	1128	
	3	—	—	1206	—	2096	1138	
	4	—	—	1232	—	2086	1151	
	5	—	—	1304	—	2044	1142	
	6	—	—	1500	—	2078	1140	
	7	—	—	1548	—	2062	1160	
	8	—	—	1884	—	2062	1160	
21.6	111	2162	390	1572	1642	2114	1160	
	112	2168	510	1828	1872	2142	1160	
	113	2160	548	1896	1968	2118	1170	
	114	2164	869	1860	1930	2098	1158	
	115	2170	950	1177	1182	2072	1168	
	116	2158	1021	1372	1406	2112	1160	
	117	2159	1029	1922	2010	2078	1180	
21.8	118	2189	394	1998	2012	2090	1180	
	119	2178	504	1890	1908	2120	1180	
	120	2194	680	1528	1470	2100	1170	
	121	2180	1222	1696	1780	2108	1170	
22.0	122	2211	528	1507	1597	2118	1183	
	123	2208	647	1662	1692	2112	1189	
	124	2201	1171	1912	1793	2108	1189	
	125	2209	1179	1910	1940	2148	1193	
22.2	126	2221	902	1519	1519	2088	1182	
	127	2234	1389	1762	1750	2119	1192	
22.4	128	224	390	1547	1563	2118	1180	
	129	2247	492	1502	1523	2108	1204	
	130	2249	1023	1732	1735	2073	1184	
	131	224	1092	1603	1708	2088	1192	

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Cl-Dk	Dyel-Dk	Red Defl	Mag
909	11	13	—
928	03	3	—
950	30	32	—
958	68	71	—
935	81	87	—
902	162	179	—
938	360	383	—
902	388	430	—
902	724	803	—
954	447	469	749 ✓
982	690	702	809 ✓
948	762	804	833 X
940	737	784	829 ✓
904	11	12	473 ✓
952	229	240	670 ✓
898	786	876	846 ✓
910	825	906	850 X
940	719	765	824 ✓
930	329	354	711 ✓
938	568	605	787 ✓
935	369	394	724 ✓
923	488	529	767 ✓
919 ~~909~~	663	721	813 ✓
955	732	766	825 ✓
906	337	372	718 ✓
917	564	615	789 X outside circle on 4872
938	375	400	726 ✓
904	308	341	708 ✓
889	549	618	790 ✓
896	463	515	764 ✓

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1933phae.proj.1192

ZP - RA 4890 — March 23, 1933.

Strip	Star	y	x	dyfl	dxfl	Ce	Dk	Plts
22.6	132 ✓	2270	807	1416	1418	2137	1196	
	133 ✓	2260	1242	1273	1272	2118	1193	
22.8	134 ✓	2297	630	1088	1412	2089	1183	
	135 ✓	2281	1082	1792	1899	2112	1184	
29.0	136 ✓	2309	879	1832	1872	2087	1190	
	137 ✓	2307	897	1403	1413	2148	1183	
23.2	138 ✓	2292	1142	1462	1503	2123	1197	
23.4	139 ✓	2342	657	1611	1623	2132	1210	
	140 ✓	2350	704	1713	1718	2117	1193	
	141 ✓	2360	848	1892	1924	2119	1193	
	142 ✓	2343	958	1512	1592	2128	1189	
23.8	143 ✓	2388	1032	1082	1589	2112	1188	
24.0	144 ✓	2406	1015	1563	1598	2103	1192	
	145 ✓	2409	1178	1292	1286	2079	1193	
24.2	146 ✓	2437	649	1348	1347	2067	1188	
	147 ✓	2421	668	1412	1420	2092	1184	
	148 ✓	2438	692	1446	1422	2052	1182	
	149 ✓	2431	1147	1872	1838	2068	1177	
24.4	150 ✓	2443	1063	1727	1672	2068	1173	
24.6	151 ✓	2471	1062	1768	1712	2032	1178	
24.8	152 ✓	2486	787	1190	1192	2024	1184	
	153 ✓	2478	1048	1702	1712	2021	1180	
25.0	154 ✓	2503	979	1632	1683	2109	1188	
	155 ✓	2511	1025	1350	1303	2078	1188	
25.2	156 ✓	2516	1172	1732	1648	2102	1192	
25.4	157 ✓	2547	936	1618	1693	2057	1193	
	158 ✓	2537	955	1443	1442	2062	1184	
	159 ✓	2548	1075	1778	1792	2073	1199	
	1	1990	951	1200	—	2078	1196	
	1	2300	1021	1211	—	2089	1198	

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a-dk	dfl dk	rel dfl	mag.	
941	221	235	669	✓
925	79	85	591	✓
906	217	240	671	✓
928	661	712	811	✓
897	662	738	818	✓
965	225	233	669	✓
906	285	315	699	✓
922	407	441	741	✓
924	522	565	777	✓
926	715	772	826	✓
939	333	355	711	✓
924	397	430	738	✓
911	388	425	736	✓
886	96	108	608	✓
879	154	181	649	✓
908	232	256	677	✓
870	252	290	690	✓
891	678	760	823	✓
895	526	588	782	✓
854	562	659	800	✓
840	7	8	452	✓
841	527	626	791	✓
921	469	509	761	✓
890	138	155	638	✓
990	498	503	760	✗ outside circle on 4672.
864	462	535	769	✗ " " " "
878	228	260	679	✗ " " " "
874	586	671	803	✗ " " " "
882	04	05	—	
891	13	15	—	

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K.P. – R.A. 4890 – March 23, 1933.

Strip	Star Class	Y	Y	Diff	Diff	Cl	Clk	Value
	2	–		1222	–	2198	1208	
	3	–	–	1268	–	2068	1208	
Plate	4	–	–	1282	–	2108	1203	
Invalid	5	–	–	1352	–	2078	1208	
	6	–	–	1529	–	2086	1212	
	7	–	–	1586	–	2092	1213	
	8	–	–	1893	–	2058	1209	540

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1933phae.proj.1292

Ce-Dk	Dyf-Dk	Cd Dyf	Mag.
990	14	14	—
860	60	69	—
905	79	87	—
870	144	165	—
874	317	361	—
879	373	423	—
849	684	806	—

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1933phae.proj.1292

DJP - R.A. 4903 - March 24, 1933.

Strip	Star	y	x	Diff	Diff	Cc	Dk	Faults
	12	2029	868	1153	—	2038	1149	
	1	2360	1036	1161	—	2042	1148	
	2	—	—	1174	—	2046	1160	
	3	—	—	1204	—	2030	1156	
	4	—	—	1211	—	2041	1150	
	5	—	—	1207	—	2042	1163	
	6	—	—	1454	—	2063	1167	
	7	—	—	1523	—	2047	1158	
	8	—	—	1843	—	2092	1167	525
15.0	1	1510	881	1707	1654	2064	1169	
15.2	2	1515	1020	1727	1738	2092	1163	
15.6	3	1567	671	1649	1883	2058	1168	
15.8	4	1587	728	1878	1868	2054	1162	
	5	1579	1153	1763	1782	2068	1163	
	6	1583	1198	1399	1422	2088	1167	
	7	1578	1242	1642	1600	2073	1164	
16.0	8	1606	940	1853	1882	2062	1145	
	9	1602	1130	1822	1860	2077	1147	
	10	1601	1151	1331	1372	2073	1149	
16.2	11	1617	617	1608	1598	2082	1153	
	12	1628	993	1809	1812	2057	1162	
	13	1629	1023	1568	1548	2057	1154	
16.4	14	1639	649	1813	1783	2057	1170	
	15	1645	967	1832	1830	2068	1153	
	16	1640	1140	1722	1672	2062	1144	
	17	1651	1149	1553	1533	2037	1152	
16.6	18	1660	582	1618	1562	2062	1138	
	19	1672	580	1830	1803	2086	1148	
	20	1678	727	1284	1258	2052	1142	
	21	1668	829	1858	1778	2067	1138	

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1933phae.proj.1292

cc	dk	dyl	dk	Red	dyl	Mag
889		04		04		—
894		13		14		—
886		14		16		—
874		48		55		—
891		61		68		—
879		144		164		—
896		287		321		—
889		365		411		—
925		676		730		—
895		511		571		779
929		569		613		789
890		598		671		804
892		711		796		840
905		609		673		805
921		243		264		687
909		457		503		760
917		722		787		838
930		694		746		826
924		202		219		669
929		450		484		755
895		648		724		820
903		404		447		744
887		628		708		815
915		678		741		825
918		553		603		786
885		391		442		743
924		452		490		756
938		668		712		817
910		129		142		637
929		680		732		822

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K.J.P. – R.A. 4903 – March 24, 1933

Mag	Plate	y	x	dy/dt	dy/dt	cc	Dk	Volts
	22	1661	925	1202	1188	2047	1148	
	23	1660	932	1827	1857	2032	1140	
	24	1662	1331	1722	1782	2037	1142	
16.8	25	1680	603	1804	1848	2042	1142	
	26	1677	645	1132	1149	2042	1142	
	27	1682	923	1679	1644	2042	1142	
17.0	28	1701	571	1868	1882	2054	1143	
	29	1710	583	1453	1463	2067	1139	
	30	1713	608	1450	1489	2042	1148	
	31	1711	778	1662	1673	2018	1150	
	32	1711	849	1456	1503	2063	1148	
	33	1700	960	1692	1628	2093	1152	
	34	1709	1199	1633	1657	2037	1147	
	35	1699	1338	1752	1722	2062	1147	
	36	1702	1152	1812	1822	2038	1143	
17.2	37	1729	500	1542	1542	2056	1152	
	38	1730	543	1613	1627	2027	1137	
	39	1739	532	1927	1839	2069	1138	
	40	1729	858	1707	1718	2048	1148	
	41	1729	904	1829	1833	2032	1146	
	42	1737	1157	1417	1417	2058	1137	
17.4	43	1751	605	1063	1546	2040	1149	
	44	1747	856	1858	~~1628~~	2092	1147	
17.8	45	1791	471	1603	1603	2063	1152	
	46	1779	679	1814	1838	2028	1153	
	47	1791	710	1768	1798	2047	1150	
	48	1792	700	1162	1166	2048	1139	
	1N	2029	868	1142	—	2042	1148	
	1	2360	1036	1153	—	2017	1142	
	2	—	—	1173	—	2023	1142	

* Reject – magnitude agrees better. JGC

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1933phae.proj.1292

Ce dk	Defl dk	Red Defl	Mag.
904	42	46	549
892	702	781	838
895	610	681	808
900	684	760	830
900	———	———	off curve (too high!)
900	519	571	780
911	732	804	843
928	319	344	718
904	321	355	721
868	517	596	784
915	331	362	723
881	508	576	779
890	498	560	775
915	590	645	797
895	674	753	829
904	390	431	740
890	483	543	771
936	750	801	841
895	564	597	784
886	685	773	834
921	280	304	704
891	405	455	747
945	~~396~~ *	~~651~~ *	~~793~~ 739 *
911	451	495	757
875	670	765	832
897	633	701	815
909	25	28	514
899	~~01~~	~~01~~	—
875	11	13	—
881	31	35	—

* mag. uncertain because of difference in deflection readings

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1933phae.proj..1292

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H.J.P. R.H 4903 March 24, 1933

Strip	Star	y	x	Dyl	Dyl	cc	dk	Volts
	3	—	—	1208	—	2012	1138	
	4	—	—	1208	—	2028	1143	
	5	—	—	1284	—	2067	1140	
	6	—	—	1444	—	2027	1153	
	7	—	—	1522	—	2038	1148	
	8	—	—	1852	—	2043	1143	600

gmc - March 25, 1933

	1s	4027	823	1373	—	2268	1430	5.20
	1	2368	1852	1430	—	2273	1407	
	2	—	—	1432	—	2258	1383	
	3	—	—	1438	—	2252	1380	
	4	—	—	1421	—	2242	1360	
	5	—	—	1502	—	2292	1390	
	6	—	—	1668	—	2253	1370	
	7	—	—	1731	—	2262	1417	
	8	—	—	2060	—	2294	1397	
18.0	49 ✓	1801	421	2012	2000	2308	1400	
	50 ✓	1790	440	1864	1962	2322	1422	
	51 ✓	1806	496	1491	1502	2332	1402	
	52 ✓	1799	702	2032	2000	2308	1380	
	53 ✓	1810	734	2104	2084	2312	1402	
	54 ✓	1802	1028	1929	1924	2332	1420	
~~18.2~~	55 ✓	1809	1160	1932	1902	2350	1418	
	56 ✓	1810	1249	1680	1671	2354	1428	
	57 ✓	1804	1301	2050	2060	2366	1450	
18.2	58 ✓	1818	448	1890	1852	2346	1439	
	59 ✓	~~1852~~ 1820	738	2090	2062	2362	1442	
	60 ✓	1826	882	2000	2048	2396	1430	
	61 ✓	1820	1068	1620	1636	2358	1430	
	62 ✓	1830	1148	1888	1830	2360	1420	

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1933phae.proj.1192

cl-dk	dyfl-dk	Red Dyfk	Mg.
874	70	79	—
885	65	73	—
927	144	155	—
874	291	333	—
890	374	420	—
900	709	790	—
			—
938	~~57~~	~~61~~	—
866	23	26	—
875	49	56	—
872	58	67	—
882	61	69	—
902	112	124	—
883	398	450	—
845	314	372	—
897	663	735	—
908	606	657	805 ✓
900	493	548	774 ✓
930	94	101	610 ✓
928	636	685	813 ✓
910	692	760	833 ✓
912	506	555	777 ✓
932	499	536	771 ✓
926	247	267	685 ✓
916	605	660	806 ✓
907	432	476	752 ✓
920	634	690	814 ✓
966	594	615	793 ✓
928	198	213	667 ✓
940	439	467	749

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1933phae.proj.1292

J. F. McJ. – P. H. 4903 – March 25, 1936.

Strip	Star	y	x	dyfl	dyfl. cc	dk	Volts
18.2	63	1850	394	1980	2002	2376	1430
	64	1890	740	1910	1876	2370	1430
	65	1842	850	1560	1542	2374	1448
	66	1858	829	1802	1829	2412	1458
	67	1840	1316	2162	2110	2400	1462
18.6	68	1862	518	1862	1830	2354	1458
	69	1872	1018	1988	1978	2412	1472
18.8	70	~~1896~~	~~1199~~	~~1830~~			
	71	1896	1199	1830	1812	2402	1464
	72	1890	1316	2180	2180	2420	1472
19.0	73	1899	360	1998	1960	2402	1466
	74	1902	411	2072	2072	2392	1504
	75	1900	717	2150	2182	2390	1472
	76	1904	808	1672	1670	2378	1472
	77	1902	1022	2028	2050	2400	1448
	78	1898	1200	1812	1778	2350	1412
19.2	79	1918	1326	1725	1793	2288	1301
	80	1927	1398	1871	1832	2197	1283
19.4	81	1933	878	1842	1882	2210	1248
	82	1950	899	1923	1973	2168	1255
	83	1948	1182	1748	1728	2168	1242
19.6	84	1959	550	1486	1489	2167	1236
	85	1967	773	1892	1853	2163	1243
	86	1978	982	1737	1768	2143	1240
	87	1968	1039	1962	2048	2167	1257
	88	1962	1339	1968	1955	2143	1263
19.8	89	1990	330	1938	1952	2147	1248
	90	1990	1050	1794	1684	2107	1229
20.0	91	2001	621	1813	1794	2173	1242
	92	2009	697	1938	1873	2167	1241

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1933phae.proj.1292

cc-Dk	Dyfl Dk	Red Dyfl	Mag	
946	561	593	787	✓
940	463	493	759	✓
926	103	111	617	✓
954	357	374	721	✓
938	674	718	823	✓
896	388	433	740	x
940	511	437	741	✓
938	357	381	723	✓
948	708	746	830	x
936	513	548	774	✓
888	568	640	800	✓
918	694	756	833	✓
906	199	220	669	✓
952	591	621	795	✓
938	383	409	732	✓
987	458	465	749	✓
914	568	622	795	✓
962	614	629	797	✓
913	683	748	830	✓
926	496	535	771	✓
934	254	272	688	✓
910	629	692	815	✓
898	507	564	780	✓
910	748	822	848	✓
886	698	794	840	✓
904	702	776	837	✓
928	510	549	774	✓
931	561	602	790	✓
918	654	712	822	✓

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1933phae.proj.1292

Yp - CN 4903 - March 25, 1933.

Strip	Star	y	x	dyf	dyf c	cc	dk	Volts	
	93 ✓	2008	1336	1848	1888	2137	1242		
20.2	94 ✓	2032	428	1243	1248	2147	1236		
	95 ✓	2037	426	1852	1848	2170	1238		
	96 ✓	2021	1142	1773	1702	2168	1252		
	97 ✓	2017	1363	1902	1893	2187	1254		
20.6	98 ✓	2061	407	1908	1838	2172	1264		
	99 ✓	2064	862	1683	1628	2129	1262		
	100 ✓	2060	1053	1652	1682	2153	1273		
	101 ✓	2071	1193	1292	1287	2153	1278		
20.8	102 ✓	2089	402	1812	1786	2182	1283		
	103 ✓	2093	573	1894	1913	2143	1282		
	104 ✓	2077	768	1501	1506	2162	1293		
	105 ✓	2091	776	1706	1762	2157	1277		
	106 ✓	2078	809	1856	1856	2162	1274		
21.0	107 ✓	2105	392	1974	1943	2154	1252		
	108 ✓	2110	533	1948	1957	2167	1278		
	109 ✓	2100	683	1942	1928	2150	1282		
	110	2105	1032	1552	1563	2177	1267		
	111 ✓	2096	1150	1782	1795	2160	1268		
	112 ✓	2112	1228	1728	1772	2153	1262		
	113	2103	1284	1936	1988	2168	1248		
	1N1	2027	823	1250	—	2142	1248	520	
	1	2368	1002	1263	—	2117	1233		
	2	—	—	1250	—	2092	1242		
	3	—	—	1292	—	2090	1233		
	4	—	—	1312	—	2128	1246		
	5	—	—	1383	—	2142	1228		
	6	—	—	1552	—	2143	1255		
	7	—	—	1642	—	2122	1263		
	8	—	—	1904		2152	1263		

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1933phae.proj.1292

cc-clk	Dyfl-clk	Red Dyfl	Mag.
895	626	699	817 ✓
911	9	10	Off curve (too bright!)
932	612	657	805 ✓
916	510	557	777 ✓
933	643	690	814 ✓
908	84	~~925~~ 93	603 ✓
867	393	454	745 ✓
880	394	448	743 ✓
875	11	13	Off curve! (too bright!)
899	516	574	782 ✓
861	621	722	824 ✓
869	210	242	676 ✓
880	457	519	766 ✓
888	782	880	Off curve!
902	706	783	839 *
889	674	758	833 ✓
868	653	752	832 ✓
910	290	319	703 ✓
892	520	594	787 ✓
891	488	548	774 ✓
920	714	777	838 ✓
894	02	02	—
884	30	34	—
850	08	09	—
867	59	68	—
882	66	75	—
924	155	167	—
888	297	334	—
859	379	441	—
889	691	780	—

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1933phae.proj.1792

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gme. R.H. 4903 March 25, 1933.

	Strip	Star	y	x	dyf	dyf	cl	dx	Volts	C
		1s	2027	823	1348	—	2432	1420	6.22	
		1	2358	998	1462	—	2480	1448		
		2	—	—	1498	—	2490	1487		
		3	—	—	1553	—	2507	1490		
		4	—	—	1570	—	2523	1507		
		5	—	—	1652	—	2558	1507		
		6	—	—	~~1850~~ 1850	—	2532	1483		
		7	—	—	1935	—	2542	1480		
		8	—	—	2305	—	2544	1477		
21.2		114	2120	420	1944	1952	2543	1480		
		115	2120	978	1943	1931	2513	1476		
		116	2118	1060	2370	2312	2520	1470		
		117	2114	1078	2272	2310	2543	1450		
		118	2111	1092	2288	2272	2530	1460		
		119	2127	1170	2379	2358	2532	1440		
		120	2116	1387	2290	2290	2487	1430		
21.4		121	2146	504	2373	2358	2538	1432		
		122	2142	513	2270	2252	2538	1422		
		123	2145	547	2212	2204	2506	1423		
		124	2142	570	2021	2029	2527	1420		
		125	2130	590	2332	2340	2498	1435		
		126	2138	860	2332	2312	2493	1420		
		127	2150	1178	2270	2358	2471	1410		
		128	2140	1320	1812	1816	2512	1421		
		129	2151	1378	2251	2275	2475	1400		
21.6		130	2161	369	1918	1920	2540	1412		
		131	2170	477	2141	2132	2512	1412		
		132	2162	514	2272	2272	2522	1418		
		133	2157	742	2252	2262	2508	1412		
		134	2168	838	2232	2272	2500	~~1400~~ 1407		
		135	2160	990	1645	1634	2495	1390		

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1933phae.proj.1292

Cl-Dk	Defl Dk	Red Defl	Mag	
1012	-72	—	—	
1032	14	14	—	
1003	11	11	—	
1017	63	62	—	
1016	63	62	—	
1051	145	138	—	
1049	367	350	—	
1062	445	418	—	
1067	828	772	—	
1063	468	440	743	✓
1037	461	445	744	✓
1050	871	829	849	✓
1093	841	769	833	✓
1070	820	767	833	✓
1092	928	850	852	✓
1057	860	814	845	✓
1106	833	754	829	✓
1116	839	751	828	✓
1083	785	724	821	✓
1107	605	547	770	✓
1063	901	848	852	✓
1073	902	840	850	x
1061	904	851	852	x
1091	393	360	718	✓
1075	863	803	843	* on circle in 4877
1128	507	449	744	✓
1100	724	658	801	✓
1103	853	772	834	x
1096	835	762	832	x
1093	845	772	834	✓
1105	249	225	676	✓

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1933phae.proj.1292

JME. RH 1903 March 25, 1933.

	Star	y	x	dlyf	dlyf	cc	dk	Volts
	136	2168	497	2287	2272	2502	1377	
	137	2170	1180	2309	2318	2497	1407	
21.8	138	2198	353	2258	2270	2503	1398	
	139	2181	364	2332	2358	2502	1372	
	140	2179	474	2242	2250	2490	1388	
	141	2176	919	1419	1413	2493	1392	
	142	2187	1042	2324	2332	2512	1385	
	143	2183	1145	1986	1977	2470	1391	
22.0	144	2210	540	1910	1898	2530	1397	
	145	2209	541	1799	1776	2502	1396	
	146	2210	614	1922	1940	2501	1420	
	147	2199	649	1707	1712	2502	1411	
	148	2197	658	2290	2312	2472	1417	
	149	2199	774	2142	2197	2483	1424	
	150	2212	824	2138	2172	2483	1409	
	151	2203	881	2248	2244	2500	1420	
	152	2207	1140	2110	2039	2473	1407	
	153	2210	1149	2208	2222	2508	1410	
	154	2199	1274	2242	2283	2453	1410	
	155	2200	1278	2351	2328	2498	1426	
	1S	2027	833	1424	—	2510	1400	
	1	2358	1002	1416	—	2512	1393	
	2	—	—	1422	—	2480	1384	
	3	—	—	1471	—	2488	1390	
	4	—	—	1470	—	2508	1398	
	5	—	—	1570	—	2512	1400	
	6	—	—	1774	—	2510	1404	
	7	—	—	1860	—	2506	1403	6.22
	8	—	—	2251	—	2506	1402	

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1933phae.proj.1792

Cl dk	Defl dk	Red Defl	Mag.	
1125	902	802	842 ✓	
1090	906	831	849 ×	
1105	866	784	837 ×	
1130	973	860	Off curve! ✓	
1102	858	778	836 ✓	
1101	24	22	502 ✓	
1127	943	837	850 ×	
1079	590	547	770 ✓	
1133	507	448	744 ×	} too close to be measured on 4872
1106	391	354	716 ×	
1081	511	472	751 ✓	
1091	298	273	693 ✓	
1055	884	838	850 ✓	
1059	745	704	815 ✓	
1074	736	685	809 ✓	
1080	826	766	833 ×	
1066	667	626	792 ✓	
1098	805	734	823 ✓	
1043	852	816	846 ✓	
1072	916	854	853 ×	
1110	24	21	—	
1119	23	20	—	
1096	38	35	—	
1098	81	73	—	
1110	72	65	—	
1112	170	153	—	
1106	371	333	—	
1103	467	421	—	
1104	855	770	—	

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1933phae.proj.1292

DJP – R.A. 4903 – March 26, 1932.

Strip	Star	Y	X	dyff	dyff	Cl	Dk	Volts
	1s	2029	922	1267	—	2296	1261	550
	1	2360	1092	1270	—	2288	1263	
	2	—	—	1292	—	2284	1278	
	3	—	—	1353	—	2293	1259	
	4	—	—	1333	—	2278	1272	
	5	—	—	1432	—	2257	1268	
	6	—	—	1610	—	2283	1270	
	7	—	—	1742	—	2273	1272	
	8	—	—	2138	—	2272	1266	
22.2	156	2218	758	2009	2014	2262	1267	
	157	2229	961	1592	1587	2293	1260	
22.4	158	2246	449	1683	1727	2257	1268	
	159	2250	553	1537	1572	2238	1272	
	160	2251	1084	1923	1809	2257	1268	
	161	2246	1151	1733	1703	2251	1253	
	162	2239	1450	1878	1848	2278	1272	
22.6	163	2276	867	1483	1494	2249	1272	
	164	2267	1304	1532	1533	2263	1269	
22.8	165	2283	1142	1907	1917	2294	1281	
23.0	166	2300	690	1492	1502	2262	1278	
	167	2311	939	2078	1973	2264	1272	
	168	2310	957	1482	1452	2268	1273	
23.2	169	2323	893	1653	1677	2342	1274	
	170	2327	1004	2049	2039	2298	1277	
	171	2339	1202	1532	1537	2299	1277	
23.4	172	2343	562	2064	2138	2314	1282	
	173	2349	718	1722	1762	2319	1286	
	174	2352	763	1821	1819	2272	1288	
	175	2354	908	2044	2052	2307	1283	
	176	2349	1018	1684	1588	2307	1297	

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1933phae.proj.1792

Cl-Dk	Dfl-Dk	Red Dfl	Mag	
1035	06	06	—	
1025	07	07	—	
1006	14	14	—	
974	94	96	—	
1006	61	60	—	
989	164	167	—	
1013	340	338	—	
1001	470	469	—	
1006	872	863	—	
995	744	748	817	✓
1033	329	318	707	✓
989	437	442	740	✓
966	283	293	698	
989	598	605	780	✓
998	465	466	744	✓
1006	591	588 ~~571~~	774	× outside circle on 4872
977	216	221	669	✓
994	63	63	573	✓
1013	631	622	784	✓
984	219	223	670	✓
992	753	759	820	×
995	194	195	658	✓
1068	391	366	721	✓
1021	767	751	819	×
1022	257	252	681	✓
1032	819	792	829	✓
1033	456	441	740	✓
984	532	540	762	✓
1024	765	746	814	✓
1010	339	336	713	✓

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1933phae.proj.1292

2yr - R# 4903 - March 26, 1933.

hrs	star	y	x	dyff	dyff	cc	dk	Plts
23.6	177	2357	989	1873	1823	2292	1293	
23.8	178	2389	1093	1719	1692	2289	1288	
24.0	179	2398	882	2018	2012	2297	1298	
	180	2410	1077	1672	1656	2257	1284	
	181	2411	1239	1393	1364	2307	1279	
24.2	182	2428	728	1562	1518	2248	1293	
	183	2433	1207	1996	1972	2327	1304	
	184	2421	1229	2039	2117	2297	1296	
24.4	185	2441	709	1431	1422	2267	1287	
	186	2444	753	1523	1572	2266	1297	
	187	2449	1123	1861	1823	2262	1287	
24.6	188	2473	1153	2061	2043	2282	1293	
24.8	189	2491	847	1292	1292	2263	1295	
	190	2481	1109	1977	1842	2269	1298	
	191	2478	1122	1812	1821	2272	1292	
25.0	192	2509	1041	1803	1808	2271	1293	
	193	2517	1087	1403	1413	2282	1277	
	194	2502	1172	1973	1963	2282	1293	
25.2	195	2522	1231	1592	1593	2252	1300	
	196	2519	1234	1764	1703	2278	1296	
25.4	197	2553	997	1850	1752	2297	1311	
	198	2539	1017	1533	1522	2287	1292	
	199	2551	1037	1990	1983	2277	1303	
25.6	200	2569	1173	1706	1443	2243	1302	
25.8	201	2581	1108	1473	1465	2258	1294	
Gain	1s	2029	922	1306	—	2312	1299	
Gain finished	1	2360	1092	1313	—	2313	1298	
	2	—	—	1324	—	2302	1294	
	3	—	—	1354	—	2273	1293	
	4	—	—	1364	—	2288	1284	

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1933phae.proj.1292

Cl – Dk	Dyfl Dk	Red Dyfl	Mag	
999	555	556	766	✓
1001	417	417	734	✓
999	707	708	808	✓
973	380	391	729	✓
928	99	107	611	✓
955	247	258	684	✓
1023	680	663	796	✓
1001	832	831	838	✓
980	139	142	633	✓
969	220	227	671	✓
975	557	571	770	✓
989	759	775	824	✓
968	—	—	off curve (too bright!)	✓
971	611	630	786	✓
980	524	534	760	✓
978	511	522	757	✓
1005	131	130	626	✓
989	675	683	802	× outside circle on 4872
952	292	305	702	× " " " "
982	461	470	745	× " " " "
986	490	497	750	× " " " "
995	235	236	675	× " " " "
974	683	700	806	× " " " "
941	122	130	626	× " " " "
964	175	182	653	× " " " "
1013	07	07	—	
1015	15	15	—	
1008	30	30	—	
980	61	62	—	
1004	80	80	—	

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1933phae.proj.1292

Strip	Star	y	x	dyfl	dxfl	cl	dk	Volts	
	5	—	—	1472	—	2317	1302		
	6	—	—	1632	—	2303	1292		
	7	—	—	1752	—	2286	1283		
	8	—	—	7092	—	2300	1291	540	

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1933phae.proj.1292

Cl-Dk	Dfl-Dk	Red Dfl	Mag
1015	170	167	—
1017	340	337	—
1063	469	465	—
1059	801	758	—

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1933phae.proj.1292

Cont. from Bk-90, P. 218.

gmt. RH 4954 April 20, 1933.

Strip	Star	y	x	dyff	dyff	cl	dk	Volts
	153	2350	1177	2025	2045	2250	1500	
23.6	154	2358	767	2043	2061	2268	1516	
	155	2369	893	1992	1986	2282	1512	
	156	2368	940	1818	1797	2248	1493	
23.8	157	2389	802	1912	1948	2271	1480	
24.0	158	2397	529	1645	1649	2248	1481	
	159	2402	704	2152	2093	2218	1480	
	160	2401	783	2056	2032	2232	1490	
	161	2410	791	2020	2074	2262	1480	
	162	2390	794	2182	2170	2258	1494	
	163	2408	839	1747	1748	2278	1513	
	164	2390	1124	2089	2087	2258	1482	
24.2	165	2430	552	1993	* —	2268	1481	
	166	2424	1020	2038	2050	2250	1489	
24.4	167	2451	831	2148	2116	2278	1497	
	15	1997	783	1507	—	2312	1500	
	1	2349	901	1508	—	2270	1502	
	2	—	—	1544	—	2271	1502	
	3	—	—	1563	—	2382	1490	
	4	—	—	1590	—	2390	1484	
	5	—	—	1622	—	2420	1478	
	6	—	—	1798	—	2422	1488	
	7	—	—	1838	—	2430	1490	
	8	—	—	2143	—	2352	1498	5.22

Plate finished

* image obscured by scale.

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1933phae.proj.1792

α - Dk	Def: Dk.	Red. Def.	May.
750	535	713	829 ✓
752	536	713	829 ✓
770	477	620	805 ✓
755	314	416	750 ✓
791	450	569	792 ✓
767	166	216	672 ✓
738	642	870	off curve ✓
742	554	746	834 ✓
782	567	725	830 ✓
764	682	898	off curve ✓
765	234	352	730 ✓
776	606	780	843 ✓
787	512	650	812 ✓
761	555	729	830 ✓
781	635	813	off curve ✓
812	7	9	
768	6	8	
769	42	55	
892	73	80	
906	106	117	
942	144	153	
934	310	332	
940	348	370	
854	645	767	

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1933phae.proj.1292

Kiso – RH 807 – April 22, 1933.

Strip	Star	y	x	Dyf	Dyf	cc	dk	Volts
	1s	2098	1019	1396	—	2202	1328	540
	1	1737	1052	1336	—	2192	1320	
	2	—	—	1403	—	2202	1321	
	3	—	—	1492	—	2189	1313	
	4	—	—	1423	—	2186	1309	
	5	—	—	1583	—	2192	1311	
	6	—	—	1718	—	2192	1301	
	7	—	—	1829	—	2179	1307	
	8	—	—	1962	—	2209	1293	
15.0	✓ 1	1508	1101	1758	1797	2137	1297	
15.2	✓ 2	1521	982	1842	1871	2107	1289	
15.4	✓ 3	1540	1106	1942	1947	2124	1292	
15.6	✓ 4	1560	757	1857	1892	2147	1289	
16.0	✓ 5	1608	694	1812	1823	2107	1282	
	✓ 6	1609	652	1909	1982	2132	1272	
	✓ 7	1599	859	1902	1897	2118	1273	
	✓ 8	1610	936	1787	1782	2104	1269	
	✓ 9	1608	1110	1912	2057	2118	1269	
16.2	✓ 10	1621	714	1882	1907	2128	1268	
	✓ 11	1630	928	1508	1546	2108	1263	
16.4	✓ 12	1639	1132	1552	1558	2120	1268	
16.6	✓ 13	1661	1288	1576	1592	2108	1264	
	✓ 14	1652	1307	1843	1863	2112	1263	
17.0	✓ 15	1701	1018	1828	1910	2113	1264	
	✓ 16	1701	1101	1779	1807	2113	1257	
17.2	✓ 17	1729	528	1861	1942	2123	1260	
17.4	✓ 18	1757	531	1366	1343	2112	1258	
	✓ 19	1740	588	1478	1567	2107	1256	
	✓ 20	1749	603	1392	1389	2098	1253	
	✓ 21	1743	1186	1722	1753	2109	1259	

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1933phae.proj.1792

α-OR.	Def-Dk.	Red. Def.	Mag.
874	5	6	—
872	16	18	—
881	82	93	—
876	179	204	—
877	114	130	—
881	272	309	—
891	417	468	—
872	522	598	—
916	669	730	—
840	481	572	753 ✓
868	567	653	800 ✓
832	652	783	870 ✓
858	585	682	810 ✓
875	536	613	773 ✓
860	674	784	871 ✓
845	627	742	844 ✓
835	515	617	776 ✓
849	715	842	off curve
860	652	758	856 ✓
845	264	312	645 ✓
852	287	337	653 ✓
844	320	379	667 ✓
849	590	695	817 ✓
849	605	713	828 ✓
856	536	626	780 ✓
863	642	744	844 ✓
854	96	112	534 ✓
851	266	312	645 ✓
845	137	162	568 ✓
850	521	613	773

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1933phae.proj.1292

RP-OL 801 — April 22, 1933

Strip	Star	y	x	Dyf.	Dyf.	cc	Dk	Volts
17.6	✓ 22	1770	992	1814	1812	2074	1253	
17.8	✓ 23	1777	1049	1668	1675	2098	1252	
	24 ×	1792	1117	1857	1877	2091	1255	
18.0	✓ 25	1804	1418	1920	1930	2091	1258	
	✓ 26	1817	1037	1818	1897	2082	1253	
18.2	✓ 27	1820	1382	1744	1762	2087	1251	
18.4	✓ 28	1850	741	1928	1970	2093	1262	
	✓ 29	1850	737	1928	1947	2091	1262	
	✓ 30	1842	1108	1782	1812	2092	1259	
18.6	31	1869	1431	1682	1700	2108	1262	
18.8	✓ 32	1876	1208	1837	1832	2092	1258	
19.0	✓ 33	1904	327	1937	1942	2119	1262	
	✓ 34	1910	338	1940	1942	2113	1260	
	✓ 35	1909	408	1842	1878	2122	1267	
	✓ 36	1909	800	1742	1812	2103	1263	
	✓ 37	1897	940	1807	1878	2087	1259	
	✓ 38	1908	1409	1786	1823	2097	1259	
19.2	✓ 39 gms.	1930	456	1873	1901	2122	1253	
	✓ 40	1931	690	1702	1725	2108	1251	
	× 41	1914	1259	1920	1964	2108	1260	
	✓ 42	1920	1368	1872	1888	2103	1260	
19.4	✓ 43	1940	303	1920	1878	2110	1256	
	✓ 44	1938	387	1461	1450	2090	1256	
	45	1936	522	1942	1968	2092	1253	
	✓ 46	1951	583	1860	1848	2081	1255	
	✓ 47	1943	657	1755	1728	2107	1262	
	× 48	1943	~~840~~ 852	1981	1972	2098	1258	
	✓ 49	1950	1032	1488	1513	2083	1253	
19.6	✓ 50	1963	~~1156~~ 1512	1778	1804	2122	1257	
	✓ 51	1964	732	1468	1504	2096	1257	

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1933phae.proj.1192

α-Or.	Def-Dr.	Red. Def.	Mag.
821	560	682	810 ✓
846	420	497	717 ✓
836	612	732	839 ✓
833	767	921	off curve ✓
829	605	730	836 ✓
836	500	598	765 ✓
831	687	826	off curve ✓
829	676	816	off curve ✓
833	588	706	823 ✓
846	429	507	722 ✓
834	576	690	814 ✓
857	678	791	off curve ✓
853	681	799	off curve ✓
855	593	693	816 ✓
840	514	612	773 ✓
828	609	735	841 ✓
838	545	650	793 ✓
869	634	738	843 ✓
857	463	540	737 ✓
848	682	804	off curve ✓
843	420	737 498	842 ✓ 777
854	643	753	854 ✓
834	200	240	610 ✓
839	702	837	off curve ✓
826	599	724	835 ✓
845	480	568	750 ✓
840	718	855	off curve ✓
830	247	298	639 ✓
865	534	618	776 ✓
839	229	273	626 ✓

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1933phae.proj.1292

jme RH 801 april 22, 1932

Strip	Star	y	x	Defl.	Defl.	Cl.	Dk.	Volt.
	✓ 52	1970	748	1700	1700	2103	1262	
	✓ 53	1962	1092	1608	1626	2092	1263	
	✓ 54	1961	1097	1842	1858	2112	1260	
19.8	✓ 55	1982	375	1912	1930	2118	1260	
	✗ 56	1988	578	1822	1964	2108	1263	
	✓ 57	1980	689	1500	1448	2116	1262	
	✓ 58	1983	823	1780	1824	2116	1267	
	✓ 59	1989	876	1924	1940	2104	1272	
	1s	2098	1049	1278	—	2064	1277	
	1	1737	1052	1320	—	2110	1281	
	2	—	—	1370	—	2130	1283	
	3	—	—	1451	—	2102	1281	
	4	—	—	1433	—	2104	1278	
	5	—	—	1540	—	2116	1274	
	6	—	—	1713	—	2137	1276	
	7	—	—	1702	—	2108	1277	
	8	—	—	1880	—	2112	1272	5.38

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1933phae.proj..1192

Cl-Dh.	Def-Dh	Red. Df.	Magn.
841	438	521	728 ✓
829	354	427	674 ✓
852	590	692	815 ✓
858	661	770	867 ✓
845	680	793	874 x
854	212	248	614 ✓
849	513	605	769 ✓
832	660	793	874 ✓
787	1	1	—
829	39	47	—
847	87	103	—
821	170	207	—
826	155	188	—
842	266	316	—
861	437	508	—
831	425	511	—
840	602	717	—

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1933phae.proj.1292

J. M. E. R H 4872 April 22, 1933.
(Remeasurement)

Star	g	x	Defl	Defl	Cl	Dk	Volt
1s	—	—	1252	—	1992	1250	5.28
1	—	—	1261	—	1998	1252	
2	—	—	1300	—	1998	1232	
3	—	—	1292	—	1942	1232	
4	—	—	1300	—	1992	1252	
5	—	—	1390	—	1970	1256	
6	—	—	1502	—	2010	1252	
7	—	—	1540	—	2004	1256	
8	—	—	1751	—	1983	1256	
a	—	—	1592	1597	1997	1257	
b	—	—	1498	1520	1969	1252	
c	—	—	1650	1652	2003	1251	
d	—	—	1673	1679	2030	1252	
e	—	—	1653	1671	2001	1253	
f	—	—	1517	1487	2013	1254	
g	—	—	1329	1327	2000	1250	
h	—	—	1582	1582	1987	1250	
i	—	—	1752	1748	1972	1245	
j	—	—	1648	1650	1987	1247	
k (1.)	—	—	1527	1520	1958	1252	
l (2.)	—	—	1540	1540	1964	1245	
1s	—	—	1247	—	1959	1248	
1	—	—	1256	—	1968	1244	
2	—	—	1293	—	1973	1241	
3	—	—	1323	—	1960	1239	
4	—	—	1339	—	1997	1239	
5	—	—	1407	—	1962	1237	
6	—	—	1510	—	1980	1223	
7	—	—	1533	—	1962	1230	
8	—	—	1705	—	1942	1232	5.22

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1933phae.proj..1192

α-Obs	Def-Obs	Red Def	Mag	
742	2	3	—	
746	9	12	—	
766	68	89	—	
710	60	85	—	
740	48	65	—	
714	134	187	—	
758	250	329	—	
748	284	380	—	
727	495	682	—	
740	337	458	751	✓
717	259	361	714	✓
752	400	532	780	✓
778	424	545	785	✓
748	409	546	786	✓
759	248	340	707	✓
750	78	104	594	✓
737	332	450	750	
727	305	420	737	X
740	402	543	784	X
706	272	385	723	
719	295	410	733	
711	1	1	—	
722	12	17	—	
732	52	71	—	
721	84	128	—	
758	100	132	—	
725	170	232	—	
757	287	379	—	
732	303	414	—	
710	473	666	—	

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1933phae.proj.1292

Dec. - R.A. 801 - April 23, 1929.

Strip	Star	y	x	Dyff	Dyff	Cc	Dk	Parts.
	1A	2098	1007	1237	—	1988	1222	530
	1	1737	1042	1243	—	2022	1224	
	2	—	—	1304	—	2037	1223	
	3	—	—	1372	—	2042	1229	
	4	—	—	1386	—	2031	1232	
	5	—	—	1485	—	2058	1228	
	6	—	—	1678	—	2042	1228	
	7	—	—	1728	—	2027	1232	
	8	—	—	1822	—	1999	1230	
20.0	60	2001	313	1860	1856	2052	1231	
	61	2001	1262	1798	1838	2032	1233	
20.2	62	2027	407	1442	1448	2052	1231	
	63	2023	809	1669	1700	2022	1223	
20.4	64	2041	632	1514	1522	2053	1234	
20.6	65	2071	988	1803	1782	2042	1232	
20.8	66	2072	759	1782	1808	2028	1233	
	67	2090	1082	1572	1638	2032	1232	
	68	2088	1367	1514	1502	2062	1238	
21.0	69	2112	695	1808	1837	2053	1238	
	70	2099	1152	1778	1792	2043	1232	
	71	2103	1319	1748	1732	2063	1238	
21.2	72	2132	328	1732	1804	2047	1232	
21.4	73	2149	468	1700	1682	2038	1234	
	74	2141	1482	1784	1803	2067	1233	
21.6	75	2170	623	1862	1872	2049	1232	
	76	2177	668	1882	1932	2063	1238	
	77	2160	787	1852	1888	2048	1233	
21.8	78	2180	462	1652	1703	2054	1232	
	79	2183	588	1798	1803	2058	1234	
	80	2197	1048	1849	1848	2043	1230	

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1933phae.proj.1192

el. – Dk.	Defl. – Dk.	Red. Defl.	magn.
766	15	20	—
798	19	24	—
814	81	100	—
813	143	176	—
799	154	193	—
830	257	310	—
814	450	553	—
795	496	624	—
769	592	770	—
821	627	764	835 ✓
799	585	736	814 ✓
821	214	260	620 ✓
799	461	579	723 ✓
819	284	348	644 ✓
810	560	692	783 ✓
795	562	704	793 ✓
800	373	465	682 ✓
824	270	329	638 ✓
815	584	718	803 ✓
811	553	682	776 ✓
825	502	605	734 ✓
815	536	654	761 ✓
804	457	568	719 ✓
834	560	672	772 ✓
817	635	778	848 ✓
825	669	810	875 ✓
815	637	782	852 ✓
822	445	543	710 ✓
824	566	683	777 ✓
813	618	759	833 ✓

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1933phae.proj.1292

DJP - RL 801 - April 23, 1933.

Strip	Star	y	x	dy/dt	dy/dt	cc	dx	Volts
22.0	81	2200	572	1656	1708	2062	1232	
	82	2207	1063	1877	1898	2038	1222	
22.2	83	2221	621	1721	1741	2062	1232	
	84	2202	1172	1724	1722	2048	1234	
	85	2221	1222	1728	1708	2060	1232	
22.4	86	2240	967	1780	1830	2057	1234	
	87	2249	1401	1734	1747	2043	1232	
	88	2242	1002	1848	1880	2071	1235	
22.6	89	2259	519	1709	1792	2057	1241	
	90	2270	564	1583	1583	2060	1238	
	91	2270	581	1788	1850	2052	1233	
	92	2262	725	1912	1989	2058	1237	
	93	2270	1212	1642	1654	2050	1233	
	94	2271	1428	1808	1853	2072	1232	
22.8	95	2289	1071	1718	1757	2049	1235	
23.0	96	2306	499	1847	1892	2063	1232	
23.2	97	2322	809	1874	1900	2030	1237	
	98	2328	912	1764	1797	2049	1232	
	99	2331	1090	1911	1918	2057	1229	
	100	2338	1167	1832	1872	2032	1230	
23.6	101	2367	699	1804	1867	2052	1228	
	102	2361	858	1880	1933	2033	1228	
	103	2370	1141	1793	1827	2048	1228	
	104	2366	1441	1877	1878	2062	1233	
23.8	105	2380	1035	1710	1738	2043	1233	
	106	2390	1204	1896	1940	2043	1232	
24.0	107	2397	778	1842	1812	2018	1226	
	108	2400	1170	1712	1693	2038	1222	
24.2	109	2432	818	1849	1888	2028	1227	
24.4	110	2449	545	1942	1942	2059	1232	

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1933phae.proj.1192

Cl. – Dk.	Defl.-Dk.	Red. Defl.	Magn.
830	475	573	725 ✓
816	665	816	880 ✓
830	499	600	732 ✓
814	489	600	732 ✓
828	486	587	727 ✓
823	571	696	786 ✓
841	508	603	733 ✓
836	629	750	827 ✓
809	534	659	763 ✓
822	345	420	666 ✓
819	561	687	780 ✓
821	713	870	off curve ✓
817	415	507	697 ✓
840	598	710	797 ✓
814	502	619	741 ✓
831	637	768	839 ✓
793	651	820	883 ✓
811	548	676	774 ✓
822	685	837	off curve ✓
799	619	770	850 ✓
824	607	737	816 ✓
805	678	840	off curve ✓
820	582	709	795 ✓
829	644	778	848 ✓
810	491	606	736 ✓
811	686	844	off curve ✓
792	601	761	834 ✓
816	480	589	727 ✓
801	640	798	863 ✓
827	710	858	off curve ✓

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1933phae.proj.1292

Exp. R.A. 801 – April 23, 1933.

Strip	Star	y	x	Dyl.	Dyl.	Cl	Dk	Volts.
24.6	111	2471	993	1692	1678	2042	1232	
	112	2460	1020	1890	1908	2047	1230	
	113	2458	1114	1731	1735	2030	1229	
24.8	114	2478	530	1813	1830	2057	1229	
	115	2491	1007	1472	1402	2032	1232	
	116	2490	1078	1828	1860	2042	1224	
25.0	117	2510	579	1841	1808	2054	1231	
	118	2511	658	1763	1782	2053	1224	
	119	2510	1032	1592	1560	2037	1234	
25.2	120	2520	541	1369	1409	2063	1232	
	121	2512	569	1633	1527	2052	1224	
	Remeasurement							
	122	2511	658	1757	1770	2058	1238	
	123	2522	632	1870	1907	2047	1231	
	124	2519	956	1712	1723	2032	1239	
	125	2517	1017	1852	1862	2027	1222	
25.4	126	2514	719	1407	1442	2038	1223	
	127	2507	1109	1768	1852	2027	1226	
	128	2501	1133	1758	1808	2023	1227	
	129	2538	1251	1880	1788	2026	1238	
25.8	130	2534	898	1722	1740	2038	1228	
26.0	131	2611	968	1632	1637	2062	1228	
	132	2609	1004	1858	1850	2043	1238	
26.2	133	2621	862	1713	1703	2047	1228	
	134	2628	887	1613	1632	2012	1226	
Plate Invalid	10	2098	1007	1248	—	1998	1224	520
	1	1737	1042	1256	—	1992	1223	
	2	—	—	1337	—	2010	1223	
	3	—	—	1460	—	2008	1223	
	4	—	—	1358	—	2012	1226	
	5	—	—	1548	—	2022	1231	
	6	—	—	1647	—	2012	1232	
	7	—	—	1798	—	2014	1222	
	8	—	—	1829	—	2020	1222	

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1933phae.proj.1192

Cl. – Dk.	Obsl. Ak.	Red. Obsl.	Magn.
810	453	560	717 ✓
817	669	869	off curve x
801	504	630	747 ✓
828	592	717	802 ✓
800	205	252	618 ✓
818	620	758	833 ✓
823	593	721	805 ✓
829	548	661	765 ✓
803	342	424	667 ✓
831	157	189	588 ✓
828	356	430	669 ✓
820	525	641	753 ✓
816	657	805	870 ✓
799	474	581	724 ✓
805	635	789	849 x
815	186	228	608 ✓
801	584	729	809 ✓
796	506	635	750 x
798	566	710	797 ✓
810	503	621	742 ✓
834	406	486	689 ✓
805	616	765	836 ✓
819	480	586	725 x
786	396	504	696 ✓
774	24	31	—
769	33	43	—
787	114	145	—
785	237	302	—
786	132	168	—
791	317	400	—
780	415	532	—
792	516	651	—
798	601	754	—

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1933phae.proj.1292

Dyp - BD +4429 - May 2, 1933

Strip	Star	y	x	dyfl	dxfl	Cc	Dk	Volts
	1A	2070	977	1272	—	2132	1232	600
	1	1723	1028	1470	—	2097	1232	
	2	—	—	1510	—	2148	1228	
	3	—	—	1625	—	2148	1232	
	4	—	—	1715	—	2104	1238	
	5	—	—	1797	—	2167	1242	
	6	—	—	1884	—	2199	1242	
	7	—	—	1948	—	2178	1244	
	8	—	—	2017	—	2178	1243	
14.6	✓ 1	1470	863	1670	1657	2097	1248	
	✓ 2	1467	889	1732	1742	2073	1251	
15.2	3	1520	1107	1704	1701	2078	1251	
15.4	✓ 4	1540	491	1755	1777	2159	1252	
	✓ 5	1549	1177	1872	1952	2087	1254	
15.8	6	1573	449	1744	1793	2168	1253	
	✓ 7	1591	688	1851	1857	2118	1252	
16.0	8	1598	1119	1942	1922	2073	1254	
16.2	✓ 9	1630	381	1834	1850	2200	1254	
	10	1621	408	1982	2032	2187	1258	
	✓ 11	1630	502	1868	1888	2177	1257	
16.6	✓ 12	1682	1192	1668	1677	2093	1252	
	✓ 13	1692	1168	1868	1892	2118	1256	
17.2	✓ 14	1718	1001	1832	1833	2106	1262	
	✓ 15	1720	589	2047	2067	2206	1262	
17.8	16	1790	438	1968	1948	2227	1262	
	✓ 17	1790	1085	1922	1927	2178	1267	
	✓ 18	1771	1160	1832	1834	2152	1265	
	19	1771	1188	1905	1896	2108	1260	
18.0	✓ 20	1810	1187	1907	1958	2148	1263	
18.2	✓ 21	1822	862	1992	2017	2212	1260	

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1933phae.proj.1192

Cl. – Ck.	Defl.-Ck.	Red. Defl.	Magn.
900	140	44	—
865	238	275	—
920	282	306	—
916	393	429	—
866	477	550	—
925	555	600	—
957	642	670	—
934	704	754	—
935	774	827	—
849	415	479	614 ✓
822	486	591	668 ✓
827	451	543	645 ✓
907	514	527	637 ✓
833	658	710	746 ✓
915	515	562	653 ✓
866	602	696	735 ✓
839	678	809	827 ✓
946	588	632	693 ✓
929	749	806	825 ✓
920	621	624	688 ✓
841	420	498	623 ✓
862	624	715	750 ✓
844	570	677	720 ✓
944	795	842	857 ✓
965	696	722	754 ✓
911	657	720	752 ✓
887	568	641	699 ✓
898	640	714	749 ✓
885	669	757	781 ✓
952	744	782	804 ✓

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1933phae.proj.1292

ZP - RR 4433 - May 2, 1933.

Time	Star	y	x	Defl	Defl	cc	Dk	Volts
	✓ 22	1830	537	1888	1897	2227	1262	
18.4	✓ 23	1850	312	2022	2040	2247	1261	
18.6	✓ 24	1869	518	1992	1988	2252	1263	
18.8	✓ 25	1887	479	2067	2090	2242	1263	
	✓ 26	1879	275	2037	2058	2262	1262	
19.0	✓ 27	1893	1079	1863	1867	2192	1266	
19.2	✓ 28	1928	826	1762	1754	2198	1268	
	✓ 29	1911	968	1830	1826	2190	1263	
19.4	✓ 30	1940	847	1777	1782	2207	1263	
	✓ 31	1942	759	2011	2026	2210	1271	
19.6	✓ 32	1970	391	2062	2010	2282	1272	
	✓ 33	1972	861	1919	1893	2232	1268	
	✓ 34	1963	1154	1827	1829	2160	1267	
19.8	✓ 35	1991	691	1742	1783	2241	1264	
	✓ 36	1996	760	1903	1941	2232	1268	
20.0	✓ 37	2002	1401	1920	1940	2189	1272	
20.2	✗ gmc. 38	2053	497	2113	2035	2302	1256	
	✓ 39	2050	498	1790	1768	2279	1253	
	✓ 40	2044	1222	1606	1570	2218	1250	
20.6	✓ 41	2078	286	2002	2050	2308	1253	
	✓ 42	2070	451	1982	1967	2303	1252	
	✓ 43	2061	1343	1801	1809	2238	1248	
20.8	44	2089	1278	1948	1968	2213	1248	
21.0	✗ ✓ 45	2098	304	2132	2154	2331	1253	
	✓ 46	2099	618	2023	2012	2270	1252	
	✓ 47	2102	1292	2025	2012	2218	1251	
21.2	48	2126	1358	1900	1930	2222	1252	
21.4	✗ ✓ 49	2148	428	2091	2137	2288	1250	
21.6	50	2161	893	1982	1972	2252	1250	
21.8	✓ 51	2184	743	2092	2114	2248	1253	

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1933phae.proj..1992

Cl.-Dk.	Dfl.-Dk.	Red. Dfl.	Magn.
965	630	652	704 ✓
986	770	782	804 ✓
989	727	736	765 ✓
979	815	895	850 ✓
1000	785	785	806 ✓
926	599	697	737 ✓
930	490	526	636 ✓
927	565	610	680 ✓
944	516	547	647 ✓
939	746	796	816 ✓
1010	764	757	781 ✓
964	638	661	711 ✓
893	561	628	690 ✓
977	498	510	629 ✓
964	654	678	721 ✓
917	658	718	751 ✓
1046	818	781	809 ✗
1026	526	515	631 ✓
968	338	350	554 ✓
1055	773	733	763 ✓
1051	722	688	729 ✓
990	557	563	655 ✓
965	710	735	765 ✓
1078	890	828	842 ✗
1018	765	752	778 ✓
967	767	792	812 ✓
970	663	682	725 ✓
1038	867	837	852 ✗
1002	727	726	756 ✓
995	850	853	868 ✓

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1933phae.proj.1292

jme RH 4433. May 2, 1933.

Strip	Star	y	x	Defl.	Defl.	d.	Dk.	Volt.
	52	2188	889	1887	1892	2257	1251	
	53	2196	1295	1960	1932	2208	1248	
22.0	54	2211	316	1912	1898	2282	1250	
	55	2197	367	1972	1942	2293	1249	
	56	2208	543	1950	1940	2264	1249	
	57 =54	2197	643	2012	2070	2262	1251	
	58 =53	2197	1297	1937	1951	2184	1250	
22.2	59	2230	570	1993	2011	2272	1250	
	60	2231	851	2028	2022	2243	1250	
	61	2230	877	2056	2027	2239	1253	
	62	2220	1293	(Image obtained)	1993	2222	1251	
22.4	63	2242	357	1831	1803	2300	1257	
	64	2248	917	2082	2098	2258	1258	
	65	2245	1197	1897	1897	2225	1252	
22.6	66	2260	1308	1952	1968	2218	1254	
	67	2265	1330	1818	1862	2245	1253	
22.8	68	2281	693	2006	2003	2252	1257	
	69	2288	793	1872	1872	2243	1253	
	70	2298	988	1520	1470	2236	1258	
	71	2282	1321	1690	1715	2225	1257	
	72	2290	1348	1848	1864	2242	1253	
23.0	73	2313	306	2012	2052	2318	1258	
	74	2318	851	2095	2082	2342	1258	
	75	2310	1225	2003	2013	2242	1260	
23.2	76	2321	592	2072	2102	2282	1261	
	77	2323	680	2073	2081	2217	1260	
	78	2335	800	1865	1843	2257	1256	
	79	2320	880	1832	1826	2253	1258	
	80	2337	1003	1953	1993	2260	1253	
23.4	81	2348	465	2053	2077	2302	1260	

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1933phae.proj..1192

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
1006	638	635	695
960	698	728	759
1032	655	638	696
1044	708	677	720
1015	696	687	728
951	790	830	845
934	694	744	772
1022	752	734	764
993	775	780	802
986	788	799	817
971	742	763	787
1043	560	536	641
1000	832	832	847
973	645	665	713
964	706	735	765
992	587	590	668
995	747	750	777
990	619	625	689
978	237	243	497
968	445	460	605
989	603	610	680
1050	774	738	767
1084	830	765	789
982	748	761	786
1021	826	809	827
1017	817	805	823
1001	598	598	672
995	571	574	660
1007	720	716	750
1042	805	772	795

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1933phae.proj.1292

gmc. RH 4433 May 2, 1933.

Strip	Star	y	x	Defl	Defl	Ol	Ok	Volt.
	✓ 82	2328	1046	2068	2078	2262	1253	
23.6	✓ 83	2363	357	2072	2104	2282	1256	
	✓ 84	2370	657	2103	2082	2252	1260	
	✓ 85	2370	952	1978	1980	2258	1256	
23.8	✓ 86	2392	1060	1389	1372	2260	1252	
24.0	✓ 87	2411	608	1732	1722	2260	1255	
24.4	88	2438	409	2066	2082	2295	1257	
	✓ 89	2449	874	1847	1812	2253	1260	
24.6	90	2470	763	2098	2096	2268	1257	
25.0	✓ 91	2504	993	~~2045~~ 1928	1943	2242	1253	
25.2	✓ 92	2518	565	1798	1812	2292	1255	
	✓ 93	2517	647	2099	2116	2283	1252	
	✓ =91 94	2502	992	1938	1952	2262	1259	
	✓ 95	2512	1021	2082	2078	2272	1256	
25.6	✓ 96	2579	~~576~~ 742	2040	2028	2272	1256	
	1s	2070	977	1302	—	2170	1252	
	1	1713	1028	1410	—	2152	1253	
	2	—	—	1472	—	2170	1254	
	3	—	—	1563	—	2178	1252	
	4	—	—	1720	—	2172	1254	
	5	—	—	1752	—	2203	1253	
	6	—	—	1902	—	2232	1258	
	7	—	—	1917	—	2218	1257	
Plate Finished	8	—	—	2027	—	2202	1258	4.28

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1933phae.proj..1192

Cl.-Dk.	Dfl.-Dk.	Red. Dfl.	Magn.
1009	820	812	828 ✓
1026	832	812	828 ✓
992	832	839	852 ✓
1002	723	722	754 ✓
1008	128	127	377 ✓
1005	472	470	610 ✓
1038	817	789	809 ✓
993	569	572	659 ✓
1011	840	832	847 ✓
989	682	691	731 ✓
1037	550	512	630 ✓
1031	855	830	845 ✓
1003	686	682	724 ✓
1016	824	813	830 ✓
1016	778	768	790 ✓
918	50	54	—
899	157	175	—
916	218	238	—
926	311	336	—
918	466	508	—
950	499	525	—
974	644	661	—
961	660	686	—
944	769	815	—

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1933phae.proj.1292

Vyp - C N 4999 - May 4, 1933.

Disp	Star	y	x	Dyll	Dyll	Cc xk	Volts
	12	2057	829	1447	—	2342 1441	525
	1	2076	1198	1452	—	2392 1448	
	2	—	—	1473	—	2354 1454	
	3	—	—	1512	—	2361 1453	
	4	—	—	1538	—	2358 1453	
	5	—	—	1633	—	2342 1443	
	6	—	—	1824	—	2392 1442	
	7	—	—	1873	—	2392 1452	
	8	—	—	2172	—	2333 1432	
14.6	1	1478	731	1702	1689	2361 1451	
16.2	2	1623	985	2232	2238	2418 1457	
16.4	3	1647	1261	2092	2120	2342 1463	
16.6	4	1659	568	1777	1792	2407 1457	
17.2	5	1728	618	2108	2132	2432 1461	
17.4	6	1758	341	2062	2122	2412 1459	
17.6	7	1763	1229	2111	2162	2420 1464	
	8	1767	543	2082	2100	2417 1457	
18.0	9	1811	1187	2142	2162	2397 1468	
18.4	10	1839	597	2182	2192	2432 1463	
18.6	11	1869	659	2103	2112	2397 1462	
	12	1860	679	2028	2047	2402 1461	
19.2	13	1914	737	1702	1695	2412 1466	
19.6	14	1966	311	1861	1918	2372 1467	
19.8	15	1979	810	2182	2142	2392 1468	
	16	1983	1004	2242	2143	2368 1459	
20.0	16a	1993	691	1628	1603	2383 1467	
	12	2057	829	1462	—	2357 1459	
	1	2076	1198	1476	—	2398 1458	
	2	—	—	1492	—	2382 1459	
	3	—	—	1533	—	2373 1473	

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1933phae.proj..1292

Cl.-Ck.	Defl.-Ck.	Red. Defl.	Magn.	
901	6	7	—	Plate centred poorly with regard to three others.
944	4	4	—	
900	19	21	—	
908	59	65	—	
905	85	94	—	
899	190	211	—	
950	382	402	—	
940	421	448	—	
901	740	821	—	
910	244	267	671	✓
961	778	809	833	✓
879	643	732	816	×
950	327	345	698	✓
971	659	676	802	✓
953	633	662	800	✓
956	672	711	811	×
960	634	660	799	✓
929	684	736	816	✓
969	724	747	820	✓
935	645	688	804	✓
941	576	609	782	✓
946	232	244	663	✓
905	422	465	737	✓
924	694	750	820	✓
909	733	807	831	✓
916	148	162	633	✓
898	3	3	—	
940	18	19	—	
923	33	36	—	
900	60	67	—	

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1983phae.proj.1292

Strip	Star	y	x	Defl	Defl	Ce	Le	Volts
	4	—	—	1540	—	2388	1463	
	5	—	—	1632	—	2393	1472	
	6	—	—	1832	—	2440	1464	
	7	—	—	1922	—	2428	1462	525
	8	—	—	2208	—	2378	1477	
DAP	1	2057	829	1322	—	2228	1322	520
Mayo	1	2076	1198	1333	—	2284	1325	
BAL 4999	2	—		1362	—	2238	1332	
	3	—	—	1392	—	2208	1331	
	4	—	—	1432	—	2228	1333	
	5	—	—	1508	—	2257	1336	
	6	—	—	1728	—	2278	1333	
	7	—	—	1752	—	2278	1333	
	8	—	—	2042	—	2228	1332	
20.2	✓ 17	2039	1083	1352	1342	2237	1338	
20.4	✓ 18	2050	463	1908	1872	2252	1335	
	✗✓ 19	2040	1332	1882	1935	2287	1333	
20.6	✓ 20	2070	631	1962	1982	2212	1342	
20.8	✗ 21	2079	1340	1342	1341	2282	1338	
21.2	✓ 22	2130	1197	1778	1781	2263	1342	
21.4	✓ 23	2150	499	1998	1977	2272	1341	
21.6	✓ 24	2170	481	2042	2049	2271	1342	
	✓ 25	2160	1005	1923	1931	2273	1342	
22.0	✓ 26	2211	429	1862	1878	2239	1337	
22.2	✓ 27	2239	952	1858	1842	2218	1342	
22.6	✓ 28	2258	759	1972	1949	2263	1343	
22.8	✗✓ 29	2278	1253	1888	1858	2252	1340	
23.0	✓ 30	2312	678	1373	1370	2258	1333	
23.2	✓ 31	2331	471	1758	1788	2221	1322	
	✓ 32	2338	832	1623	1698	2212	1333	

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1933phae.proj.1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.	
925	77	83	—	
921	160	174	—	
946	368	389	—	
966	460	476	—	
901	731	811	—	
906	0	0	—	
959	8	8	—	
906	30	33	—	
877	61	70	—	
895	99	111	—	
915	172	188	—	
945	395	418	—	
945	419	443	—	
896	710	792	—	
899	9	10	465	✓
917	555	606	772	✓
954	575	603	771	✓
870	630	720	812	✓
944	3	3	440	✓
921	437	477	731	✓
931	646	693	803	✓
929	703	760	828	✓
931	585	628	779	✓
902	533	592	770	✓
876	558	633	781	✓
920	617	670	792	✓
909	545	601	771	✓
925	38	41	550	✓
889	441	495	738	✓
879	327	372	702	✓

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1933phae.proj.1292

HJP-RA 4999 - May 5, 1933

Strip	Star	y	x	Defl	Defl	Cl	Wk	Volts	Cl
	X 33	2391	1194	1550	1561	2209	1332		
	X 34	2319	1359	1502	1529	2230	1336		
2 4.6 2.7	X 35	2461	938	1362	1398	2202	1342		
	X 36	2460	1218	1417	1415	2212	1342		
20.2	X 37	2520	958	1752	1758	2232	1332		
	X 38	2530	917	1532	1541	2231	1339		
20.4	X 39	2541	850	1942	1992	2237	1947		
	14	2057	829	1344	—	2232	1343		
	1	2076	1198	1342	—	2249	1339	520	
Plate	2	—	—	1362	—	2217	1337		
Exposed	3	—	—	1398	—	2202	1338		
	4	—	—	1412	—	2262	1338		
	5	—	—	1522	—	2248	1343		
	6	—	—	1743	—	2271	1344		
	7	—	—	1814	—	2252	1338		
	8	—	—	2042	—	2248	1332		

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1933phae.proj.1192

Cl.-Dk.	Deff.-Dk.	Red. Deff.	Magn.
877	218	248	662 x
897	181	203	650 x
860	18	21	51 x
870	74	850	off curve x
900	423	471	731 x
892	197	221	655 x
890	620	697	804 x
889	~~88~~		
910	3	3	
880	25	28	
864	60	70	
924	74	80	
905	179	198	
927	399	430	
914	476	521	
916	710	775	

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1933phae.proj.1292

gme. R.H. 5000 May 5, 1933.

Strip	Star	y	x	Defl	Defl.	Cl	Ok.	v at
	1s	2120	882	1338	—	2308	1332	5.20
	1	2070	1247	1348	—	2333	1332	
	2	—	—	1402	—	2290	1340	
	3	—	—	1450	—	2293	1341	
	4	—	—	1475	—	2343	1341	
	5	—	—	1543	—	2303	1347	
	6	—	—	1722	—	2322	1346	
	7	—	—	1842	—	2320	1347	
	8	—	—	2121	—	2300	1346	
15.0	1 ✓	1516	590	1744	1750	2318	1347	
15.2	2 ✓	1524	879	1630	1652	2320	1353	
	3 ✓	1518	1182	1953	2012	2327	1357	
15.4	4 ✓	1557	980	2153	2180	2340	1351	
	5 ✓	1550	1270	1354	1352	2308	1352	
15.8	6 ✓	1588	1219	2048	2076	2328	1358	
16.0	7 ✓	1597	512	2161	2193	2332	1352	
16.2	8 ✓	1627	487	1357	1357	2353	1350	
	9 ✓	1621	834	1712	1748	2360	1347	
	10 ✗	1631	1351	1710	1706	2272	1347	
16.6	11 ✓	1667	716	2050	2110	2308	1350	
16.8	12 ✓	1692	1267	2023	2029	2320	1349	
17.0	13 ✓	1703	1270	1501	1513	2300	1346	
17.2	14 ✓	1720	588	2150	2120	2292	1351	
	15 ✓	1720	743	1448	1452	2302	1347	
17.4	16 ✓	1751	947	1426	1432	2280	1348	
17.8	17 ✓	1796	368	1981	2041	2330	1350	
	18 ✓	1781	701	1760	1820	2258	1357	
18.0	19 ✓	1800	630	1782	1788	2298	1360	
	20 ✓	1810	677	~~2220~~ 2020	2092	2288	1358	
	21 ✓	1800	719	2121	2160	2293	1351	

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1933phae.proj..1192

Cl. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
976	6	6	—
1001	16	16	—
950	62	65	—
952	109	114	—
1002	134	134	—
956	196	205	—
976	376	385	—
973	495	509	—
954	775	813	—
971	400	412	711 ✓
967	288	298	676 ✓
970	625	645	778 ✓
989	812	821	843 ✓
956	1	1	off curve (too bright!) ✓
970	704	725	806 ✓
980	825	842	853 ✓
1003	7	7	405 ✓
1013	383	378	701 ✓
925	361	390	704X (under line in 5027)
958	730	762	820 ✓
971	677	697	797 ✓
954	164	172	623 ✓
941	784	833	849 ✓
955	103	108	583 ✓
932	81	87	562 ✓
980	661	674	789 ✓
1001	433	433	716 ✓
938	425	453	723 ✓
930	698	750	815 ✓
942	789	837	850 ✓

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1933phae.proj.1292

gme. RH 5000 May 5, 1933

Strip	Star	y	x	Defl.	Defl.	cl.	Dk.	
18.2	22 X	1823	1468	1781	1759	2303	1348	
18.4	23 ✓	1840	876	1788	1726	2301	1350	
	24 X	1850	968	2163	2143	2312	1348	
	25 ✓	1849	1047	2122	2142	2318	1347	
18.6	26 ✓	1860	907	1930	1976	2312	1347	
18.8	27 ✓	1888	1124	1790	1798	2328	1358	
	28 ✓	1887	1375	2132	2170	2361	1360	
19.0	29 ✓	1900	854	1632	1612	2341	1365	
19.4	30 X	1944	1258	2120	2198	2298	1367	
19.6	31 ✓	1956	1053	1832	1842	2318	1363	
19.8	32 ✓	1988	1220	2100	2100	2298	1364	
20.4	33 ✓	2052	806	2122	2192	2250	1367	
	34 ✓	2056	1227	1928	1951	2334	1361	
	1S	2120	882	1363	—	2323	1361	
	1	2070	1241	1377	—	2342	1361	
	2	—	—	1420	—	2308	1362	
	3	—	—	1450	—	2299	1360	
	4	—	—	1478	—	2342	1360	
	5	—	—	1573	—	2302	1364	
	6	—	—	1756	—	2258	1370	
	7	—	—	1828	—	2298	1367	
	8	—	—	2133	—	2337	1372	5.18

Dup. RH 5000 — May 6, 1933

1S	2120	882	1251	—	2159	1250	520
1	2070	1247	1271	—	2168	1268	
2	—	—	1308	—	2127	1268	
3	—	—	1332	—	2123	1263	
4	—	—	1363	—	2177	1260	
5	—	—	1449	—	2168	1270	
6	—	—	1607	—	2132	1270	

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1933phae.proj..1192

Cl. – Dk.	Decl. – Dk.	Rad. Decl.	Magn.	
955	422	442	719X	(outside circle in 5027)
951	407	428	714	
964	805	835	850X	
971	785	809	838	
965	606	628	773	
970	436	450	722	
1001	791	790	830	
976	257	263	665	
931	792	850	856X	
955	474	496	735	
934	736	789	830	
883	790	895	877	
973	578	594	763	
962	2	2	—	
981	16	16	—	
946	58	61	—	
939	90	96	—	
982	118	120	—	
938	209	223	—	
888	386	435	—	
931	461	495	—	
965	761	789	—	
909	1	1	—	
900	3	3	—	
859	40	47	—	
860	69	80	—	
914	100	110	—	
898	179	199	—	
862	337	390	—	

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1933phae.proj.1792

XP – R Hoos – May 5, 1933

Hour	Star	y	x	Dyll	Dyll	Cc	Dk	Poles
	7	—	—	1693	—	2121	1273	
	8	—	—	2022	—	2170	1279	
20.6	35 ✓	2067	491	1813	1802	2170	1277	
	36 ✓	2076	1238	1812	1308	2177	1273	
20.8	37 ✓	2090	957	1712	1737	2177	1282	
	38 ✓	2095	1338	1800	1852	2182	1281	
21.0	39 ✓	2102	500	1287	1282	2170	1288	
	40 ✓	2108	727	1928	1968	2188	1286	
21.6	41 ✓	~~2164~~ 2164	358	1742	1750	2162	1293	
	42 ✓	2177	1080	1410	1435	2197	1290	
22.1	43 ✓	2210	1019	2058	2013	2170	1291	
22.2	44 ✓	2220	784	1957	1983	2162	1287	
22.4	45 ✓	2252	591	1802	1830	2174	1284	
22.6	46 ✓	2258	1109	1630	1610	2189	1293	
23.0	47 ✓	2308	428	1848	1968	2182	1322	
	48 ✓	2301	768	1820	1888	2212	1322	
23.4	49 ✓	2340	532	1463	1480	2205	1309	
23.8	50 ✓	2396	1067	1652	1700	2197	1311	
24.0	51 ✓	2411	512	1902	1916	2172	1303	
	52 ✓	~~2397~~ 2350	1211	1763	1830	2188	1312	
27.2	53 ✓	2424	1141	2018	2028	2200	1317	
25.2	54 ✓	2519	988	1659	1690	2174	1318	
	55 ✓	2517	790	1922	1950	2210	1322	
	1N	2120	882	1310	—	2208	1310	500
Pl. 0	1	2070	1247	1329	—	2210	1307	
finished	2	—	—	1361	—	2128	1303	
	3	—	—	1397	—	2189	1304	
Turn C	4	—	—	1403	—	2238	1311	
	5	—	—	1503	—	2211	1311	
	6	—	—	1672	—	2182	1320	
	7	—	—	1753	—	2187	1318	
	8	—	—	2062	—	2190	1319	

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1933phae.proj.1292

Co. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
848	420	495	—
891	743	834	—
893	530	594	762
904	37	41	510
895	442	494	738
901	545	605	765
882	—	—	off curve (too bright!)
902	662	734	802
869	453	521	744
907	132	145	618
879	744	847	834
875	683	780	816
890	532	598	763
896	327	365	698
860	586	681	786 X (outside circle in 5027)
890	532	598	763
896	162	181	637
886	365	412	714
869	606	698	790
876	484	552	751
883	706	800	821
856	356	416	715
888	614	691	789
898	0	0	—
903	22	24	—
825	58	70	—
885	93	105	—
927	92	99	—
900	192	213	—
862	352	408	—
869	435	501	—
871	743	853	—

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1923phae.proj.1292

N. P. – R.A. 0001 – May 8, 1923.

Polar Images elongated.

Strip	Star	Y	X	Dyl	Dyl	Cc	Dk	Volts
	1st	2122	859	1209	—	2079	1208	510
	1	2070	1222	1223	—	2043	1208	
	2	—	—	1282	—	2024	1203	
	3	—	—	1332	—	2031	1204	
	4	—	—	1357	—	2049	1207	
	5	—	—	1506	—	2038	1213	
	6	—	—	1753	—	2057	1212	
	7	—	—	1772	—	2058	1213	
	8	—	—	Difficult to see				
14.8	1 ✓	1493	559	1602	1569	2103	1223	
	2 ✓	1490	1152	1768	1818	2058	1218	
15.0	3 ✓	1500	849	1462	1478	2077	1218	
15.2	4 ✓	1521	1240	1219	1222	2043	1213	
15.6	5 ✓	1561	1189	1868	1898	2063	1203	
16.0	6 ✓	1608	457	1207	1212	2088	1196	
	7 ✓	1600	803	1527	1540	2048	1193	
	8 ✗	1603	1322	1508	1571	2042	1197	
16.4	9 ✓	1647	688	1858	1862	2078	1201	
16.6	10 ✓	1668	1238	1832	1838	2063	1196	
16.8	11 ✓	1678	1244	1356	1393	2041	1192	
17.0	12 ✓	1700	713	1272	1280	2092	1192	
17.2	13 ✓	1730	918	1203	1268	2053	1187	
17.6	14 ✓	1761	672	1590	1613	2098	1188	
17.8	15 ✓	1777	339	1810	1818	2082	1193	
	16 ✓	1780	600	1582	1608	2082	1188	
	17 ✓	1790	649	1909	1900	2043	1182	
	18 ✓	1780	691	1914	1927	2068	1187	
	19 ✗	1797	1429	1558	1558	2028	1187	
18.2	20 ✓	1817	849	1514	1562	2047	1182	
18.6	21 ✓	1862	1097	1549	1582	2023	1180	

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1933phae.proj.1292

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.	
871	1	1	—	
835	15	18	—	
821	79	96	—	
827	128	155	—	
842	150	178	—	
825	293	355	—	
845	541	640	—	
845	559	661	—	
—	—	—	—	
880	362	411	663 ✓	
840	575	685	745 ✓	
859	252	294	634 ✓	
830	7	8	375 ✓	
860	680	791	off curve 797 ✓	"off curve" means over 7.50
892	13	15	415 ✓	" " " "
855	340	398	660 ✓	
845	342	405	661 X	(under the line in 5027)
877	659	751	off curve 772 ✓	"off curve" means over 7.50
867	639	736	off curve 766 ✓	" " " "
849	152	179	588 ✓	
900	84	93	533 ✓	
866	73	84	524 ✓	
910	413	454	672 ✓	
889	621	699	750 ✓	
894	407	455	672 ✓	
861	722	838	off curve 817 ✓	" " " "
881	733	831	off curve 811 ✓	" " " "
841	371	441	670 X	(outside circle in 5027)
865	356	412	663 ✓	
853	385	451	671 ✓	

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1933phae.proj.1292

Kyp-RA 5001 — May 8, 1933.

trip	star	y	x	dyff	dyff	cc	xdx	Volts
18.8	22 V	1878	827	1408	1443	2017	1180	
19.2	23 V	1931	1028	1616	1593	2041	1180	
19.6	24 V	1961	1196	1862	1864	2049	1178	
20.0	25 V	1997	897	1900	1912	2051	1181	
20.2	26 V	2029	1201	1758	1713	2041	1177	
20.4	27 V	2047	463	1693	1720	2081	1172	
	28 V	2049	1211	1201	1204	2000	1177	
20.6	29 V	2068	931	1621	1632	2041	1178	
	30 V	2068	1311	1702	1682	1992	1177	
20.8	31 V	2081	472	1183	1178	2052	1173	
	32 V	2083	699	1816	1860	2062	1178	
21.4	33 V	2147	382	1653	1658	2109	1178	
	34 V	2150	1053	1315	1317	2028	1172	
21.6	35 V	2160	707	1893	1893	2094	1173	
21.8	36 V	2189	992	1824	1841	2026	1177	
22.2	37 V	2233	565	1782	1776	2063	1178	
	38 V	2231	1082	1491	1578	2007	1178	
22.8	39 V	2289	402	1733	1789	2077	1178	
	40 V	2279	741	1683	1692	1992	1174	
	41 V	2288	853	1788	1804	2017	1172	
23.2	42 V	2321	507	1373	1400	2098	1168	
23.6	43 V	2371	1041	1575	1552	2081	1173	
	44 V	2371	1188	1670	1664	1988	1171	
23.8	45 V	2391	488	1838	1898	2091	1168	
24.0	46 V	2400	1119	1848	1852	1993	1168	
24.8	47 V	2495	768	1788	1808	2022	1168	
	48 V	2492	966	1564	1551	1981	1171	
25.0	1 V	2122	809	1172	—	2073	1172	575
	1	2070	1222	1192	—	2038	1173	
	2	—	—	1234	—	1998	1168	

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1933phae.proj.1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.	
837	245	293	633	
891	424	475	676	
871	685	786	off curve 789	Off Curve mean at 750
870	725	834	off curve 814	" " " " "
864	558	646	728	
909	534	588	705	
823	25	30	456	
863	448	519	686	
815	515	632	723	
879	7	8	375	
884	660	747	off curve 769	" " " " "
931	477	512	685	
856	144	168	582	
921	720	782	off curve 790	" " " " "
849	655	771	off curve 782	" " " " "
885	601	680	744	
829	356	430	667	
899	583	649	730	
818	513	627	721	
845	624	738	off curve 767	" " " " "
930	218	234	610	
828	390	471	675	
817	496	607	713	
923	700	759	off curve 776	" " " " "
825	682	826	off curve 809	" " " " "
854	630	739	off curve 765	" " " " "
810	386	476	676	
901	0	0	—	
865	19	22	—	
830	66	80	—	

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1933phae.proj.1292

Strip	Star	y	x	dleft	dleft	Cc	dk	Volts
Plate finished	3	—	—	1318	—	2007	1173	
	4	—	—	1322	—	2022	1163	
	5	—	—	1454	—	2029	1173	
	6	—	—	1710	—	2083	1172	
	7	—	—	1749	—	2053	1167	
	8	—	—	Nat	—	acc	—	
	21 JP – RH 5027 –				May 9, 1933.			
	10	2080	932	1130	—	1993	1130	520
	1	2039	1299	1160	—	2072	1139	
	2	—	—	1172	—	2047	1143	
	3	—	—	1207	—	2031	1140	
	4	—	—	1238	—	2098	1143	
	5	—	—	1320	—	2042	1150	
	6	—	—	1552	—	2067	1158	
	7	—	—	1558	—	2072	1163	
	8	—	—	1903	—	2093	1160	
15.2	✓1✓	1518	672	1576	1522	2052	1172	
	✓2✓	1529	961	1409	1402	2078	1168	
	✓3✓	1522	1263	1702	1672	2028	1172	
15.6	✓4✓	1561	1062	1874	1907	2072	1178	
	✓5✓	1557	1352	1182	1173	2067	1174	
15.8	✓6✓	1592	1301	1843	1843	2108	1174	
16.0	✓7✓	1599	592	1880	1937	2109	1176	
16.2	✓8✓	1629	568	1183	1183	2132	1168	
	✓9✓	1627	914	1478	1500	2107	1177	
16.6	✓10✓	1671	477	1726	1738	2092	1178	
	✓11✓	1669	798	1842	1752	2111	1183	
17.0	✓12✓	1701	1348	1747	1777	2089	1193	
	✓13✓	1711	1352	1310	1338	2102	1183	
17.2	✓14✓	1721	669	1902	1892	2112	1183	

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1933phae.proj..1292

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.
834	140	168	—
859	159	185	—
856	281	328	—
911	538	590	—
886	582	657	—
—	—	—	—
863	0	0	—
933	21	23	—
904	29	32	—
891	67	75	—
955	95	99	—
892	170	190	—
909	394	434	—
909	395	435	—
933	743	796	—
880	347	394	✓712
910	237	260	✓669
856	515	601	✓779
894	712	797	✓854
893	3	3	✓off curve (too bright!)
934	669	716	✓817
933	732	785	✓848
964	15	16	✓435
930	309	332	✓690
914	554	606	✓780
928	614	661	✓797
896	569	635	✓787
920	141	153	✓628
929	714	769	✓840

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1933phae.proj.1292

χ Gp - eH 5027 - May 9, 1933.

Strip	Star	y	x	Diff l	Diff k	Cl	Ck	Volts
	√15	1721	827	1247	1253	2104	1183	
	√16	1717	903	1873	1913	2117	1187	
17.4	√17	1707	1028	1238	1237	2128	1176	
17.8	√18	1793	448	1782	1763	2168	1192	
	√19	1784	781	1571	1591	2170	1178	
18.0	√20	1800	710	1482	1487	2120	1173	
	√21	1812	756	1747	1771	2092	1172	
	√22	1803	799	1840	1919	2107	1173	
18.4	√23	1847	407	1769	1767	2122	1168	
	√24	1841	957	1419	1448	2093	1163	
	√25	1852	1124	1838	1860	2070	1168	
18.6	√26	1869	987	1591	1603	2042	1163	
18.8	√27	1891	1202	1750	1447	2057	1162	
	√28	1894	1457	1858	1860	2082	1161	
19.0	√29	1904	933	1332	1322	2022	1154	
19.4	√30	1942	992	1832	1793	2058	1150	
19.6	√31	1961	1132	1493	1492	2100	1152	
20.0	√32	1996	1298	1808	1802	2092	1154	
20.2	√33	2021	998	1808	1772	2063	1152	
20.6	√34	2067	567	1582	1573	2081	1148	
	√35	2056	581	1848	1807	2073	1146	
	√36	2060	882	1835	1847	2012	1148	
	√37	2061	1302	1636	1657	2048	1143	
20.8	√38	2080	1313	1173	1168	2080	1152	
21.0	√39	2101	577	1152	1148	2058	1147	
	√40	2109	804	1698	1729	2008	1149	
	√41	2100	847	1772	1842	1943	1150	
	√42	2092	1031	1513	1482	1992	1143	
	√43	2101	1412	1590	1610	2032	1151	
21.2	√44	2130	727	1785	1801	2018	1152	

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1933phae.proj.1292

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.
921	67	73	✓579
930	706	759	✓836
952	61	64	✓572
976	580	594	✓775
992	403	406	✓716
947	311	328	✓689
920	587	639	✓789
934	706	756	✓836
954	600	629	✓785
930	270	290	✓677
902	681	755	✓835
879	434	494	✓744
895	286	320	✓687
921	698	757	✓836
868	173	199	✓649
908	662	729	✓823
948	340	359	✓698
938	651	695	✓809
911	638	700	✓810
933	429	460	✓733
927	681	735	✓826
864	693	802	✓856
905	503	555	✓762
928	18	19	✓455
911	3	3	✓off curve (too bright!)
859	564	656	✓795
793	657	829	✓off curve
849	354	417	✓720
881	449	510	✓749
866	641	740	✓828

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1933phae.proj.1292

Dp – C4 5027 – May 9, 1933.

Strip	Star	y	x	dlpl	dlpf	Cl	dk	Volts
21.6	√45	2161	433	1542	1538	2038	1158	
21.8	√46	2179	508	1733	1762	2078	1151	
	√47	2180	1153	1268	1254	2064	1153	
22.2	√48	2229	709	1854	1854	2003	1152	
	√49	2221	858	1700	1704	2048	1152	
22.6	√50	2254	665	1613	1627	2019	1152	
	√51	2261	1182	1403	1411	2047	1152	
23.0	√52	2308	600	1657	1718	2058	1151	
	√53	2302	842	1632	1567	2052	1149	
	√54	2314	952	1664	1767	2022	1153	
23.4	√55	2340	607	1278	1282	2013	1162	
24.0	√56	2411	582	1692	1702	2072	1168	
	√57	2403	1139	1482	1510	2038	1163	
	√58	2406	1286	1527	1542	2057	1170	
24.2	√59	2430	1218	1782	1832	2022	1171	
25.2	√60	2520	862	1692	1722	2016	1172	
	√61	2521	1060	1472	1489	2047	1163	
	10	2080	932	1168	—	2018	1168	525
	W 1	2039	1299	1177	—	2075	1159	
Remeasured	2	—	—	1192	—	2024	1172	
	3	—	—	1238	—	2032	1164	
	4	—	—	1249	—	2063	1162	
	5	—	—	1327	—	2037	1160	
	6	—	—	1022	—	2053	1163	
	7	—	—	1593	—	2069	1166	
	8	—	—	1848	—	2091	1162	

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1933phae.proj.1292

Obs.-Dk.	Diff.-Dk.	Red. Diff.	Magn.
880	382	434	✓725
927	596	644	✓790
911	108	120	✓609
851	702	825	✓off curve
896	550	614	✓782
867	468	540	✓757
895	255	285	✓676
907	536	591	✓774
903	450	499	✓745
869	562	647	✓791
851	118	139	✓620
904	529	585	✓773
875	333	380	✓706
887	364	410	✓717
851	636	747	✓832
844	535	634	✓787
884	317	358	✓697
850	0	0	—
916	18	20	—
852	20	23	—
868	74	85	—
901	87	97	—
877	167	190	—
890	359	404	—
903	427	473	—
929	686	739	—

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1933phae.proj.1292

Wyp-Ck 5028- May 10, 1933.

Strip	Star	y	x	Dyff	dyff	Ce	Dk	Volts
	1A	2088	917	1133	—	1982	1122	525
	1	2038	1250	1140	—	2003	1138	
	2	—	—	1167	—	1928	1142	
	3	—	—	1213	—	1978	1152	
	4	—	—	1243	—	1967	1142	
	5	—	—	1379	—	2000	1158	
	6	—	—	1488	—	1989	1168	
	7	—	—	1627	—	2027	1168	
	8	—	—	1853	—	2022	1159	
15.0	1 ✓	1507	649	1541	1549	1978	1177	
	2 ✓	1512	938	1481	1469	1982	1168	
	3 ✓	1507	1241	1702	1728	1967	1168	
15.8	4 ✓	1587	570	1888	1867	2032	1173	
	5 ✓	1573	1278	1788	1812	2017	1172	
16.0	6 ✓	1611	892	1553	1592	2013	1177	
16.2	7 ✓	1618	547	1188	1192	2046	1182	
16.6	8 ✓	1657	773	1761	1769	2028	1172	
16.8	9 ✓	1681	1324	1722	1749	2028	1172	
	10 ✓	1692	1329	1312	1342	2021	1167	
17.0	11 ✓	1711	801	1273	1280	2032	1171	
	12 ✓	1701	881	1832	1858	2011	1166	
17.4	13 ✓	1741	1005	1232	1240	1969	1173	
17.6	14 ✓	1772	759	1088	1524	2047	1177	
17.8	15 ✓	1786	428	1742	1743	2078	1172	
	16 ✓	1790	689	1502	1499	2042	1171	
	17 ✓	1791	778	1842	1858	2032	1170	
18.0	18 ✓	1801	736	1748	1778	2043	1172	
18.2	19 ✓	1830	937	1772	1732	2050	1173	
18.4	20 ✓	1851	963	1603	1607	1998	1168	
18.6	21 ✓	1877	1182	1460	1471	2025	1171	

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1933phae.proj.1292

Cl. – Dk.	Dyff.-Dk.	Red. Dyff.	Magn.
860	11	13	—
865	2	2	—
786	25	32	—
826	61	74	—
825	101	122	—
842	221	262	—
821	320	390	—
859	459	535	—
863	694	804	—
801	368	459	720 ✓
814	307	377	694 ✓
799	547	685	782 ✓
859	704	820	828 ✓
845	628	743	800 ✓
836	395	472	723 ✓
864	8	9	350 ✓
856	593	692	784 ✓
856	563	657	774 ✓
854	160	187	627 ✓
861	105	122	598 ✓
845	679	803	821 ✓
796	63	79	570 ✓
870	339	390	699 ✓
906	570	629	764 ✓
871	329	378	695 ✓
862	680	789	815 ✓
871	591	678	780 ✓
877	279	318	673 ✓
830	437	527	737 ✓
854	294	344	683 ✓

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1933phae.proj.1292

QP. R Leo 28 - May 10, 1933.

Strip	Star	y	x	Δyfl	Δyfl cc	Δx	Wt
18.8	22	1891	912	1393	1351	1988	1172
19.2	23	1929	973	1802	1832	1972	1183
19.4	24 m.m.	1947	1112	1522	1503	1978	1171
19.6	25	1947	1281	1750	1743	1982	1162
20.0	26	2010	981	1743	1808	2011	1164
20.4	27	2055	549	1699	1610	2038	1165
	28	2048	563	1868	1792	2046	1162
	29	2047	1286	1649	1655	2028	1181
	30						
20.60	31	2062	1288	1198	1192	2022	1169
20.8	star images very close.	2089	560	1170	1166	2058	1178
	32	2082	1018	1498	1532	1950	1175
	33	2082	1398	1648	1629	2028	1180
	QP 34	2097	784	1813	1737	2014	1168
21.0	35	2120	709	1801	1882	1974	1169
21.2	36	2103	418	1602	1572	2018	1173
21.4	37	2170	491	1829	1857	2047	1183
21.6	38	2162	1139	1282	1272	2018	1181
	39	2210	842	1762	1759	2007	1178
22.0	40	2200	1077	1710	1792	2002	1167
	41	2243	649	1672	1631	1943	1172
22.4	42	2245	1168	1412	1402	2032	1172
	43	2291	827	1600	1608	2022	1176
22.8	44	2298	487	1668	1687	2048	1177
23.0	45	2300	937	1711	1718	2017	1172
	46	2330	591	1313	1300	2067	1173
23.2	47	2350	1096	1818	1878	2029	1172
23.4	48	2382	1127	1419	1427	1977	1177
23.8	49	2389	1271	1578	1572	1997	1170
	50	2401	571	1719	1703	2002	1171
24.0	51	2443	1202	1762	1798	1972	1169

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1933phae.proj..1292

Cl.–Sk.	Defl.–Sk.	Red. Defl.	Magn.
816	200	245	647
789	634	804	822
807	341	422	710
820	584	712	790
847	611	721	793
873	489	560	745
884	668	756	804
847	471	556	744
853	26	30	510
880	—	—	off curve (too bright!)
775	340	439	716
848	458	540	740
846	607	718	791
805	672	835	833
845	414	490	727
864	660	764	806
837	96	115	594
829	579	699	786
835	584	700	786
771	479	621	762
860	235	273	658
846	428	505	730
871	500	574	749
845	542	642	769
894	133	149	610
857	676	789	815
800	246	308	670
827	345	417	708
831	540	650	771
803	608	757	804

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1933phae.proj.1292

Dyp-R #5028- May 10, 1933.

Strip	Star	y	x	Dyf	Dxf	Ce	Dk	Tol	
25.0	52 ✓	2507	1049	502	1456	1939	1173		
	53. ✓	2508	852	1722	1747	2022	1168		
	1s	2088	917	1172	—	2000	1172		
	1	2038	1280	1190	—	2004	1163	520	
	2	—	—	1194	—	1988	1172		
	3	—	—	1271	—	1993	1174		
	4	—	—	1262	—	2008	1173		
	5	—	—	1374	—	2032	1172		
	6	—	—	1519	—	1973	1169		
	7	—	—	164	—	2047	1182		
	8	—	—	1902	—	1992	1183		

Plates finished

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1933phae.proj..1192

Cl. – Sk.	Deff.÷Sk.	Red. Deff.	Magn.
766	306	399	701
854	566	664	775
828	0	0	
841	27	32	—
816	22	27	—
819	97	118	—
835	89	107	—
860	202	235	—
804	350	435	—
865	459	531	—
809	719	889	—

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1933phae.proj.1292

H.P. R.A. 0031 — May 11, 1933.

Strip	Star	y	x	Dyf	Dyf	Dx	Dx	Delta
	18	2001	1033	1140	—	2287	1131	
	1	1702	809	1148	—	2162	1132	
	2	—	—	1184	—	2227	1139	
	3	—	—	1208	—	2262	1142	
	4	—	—	1292	—	2228	1153	
	5	—	—	1395	—	2262	1157	
	6	—	—	1582	—	2268	1152	
	7	—	—	1459	—	2188	1159	
	8	—	—	2102	—	2268	1147	5.5
14.2	× 1 ✓	1429	827	1903	1890	2212	1153	
14.4	× 2 ✓	1449	816	1312	1312	2247	1162	
14.6	× 3 ✓	1461	1011	1822	1726	2386	1168	
14.8	× 4 ✓	1480	672	1713	1753	2222	1163	
	× 5 ✓	1478	857	1412	1414	2233	1159	
15.0	✓ 6 ✓	1509	717	1461	1500	2218	1160	
	× 7 ✓	1512	912	1748	1708	2242	1155	
15.2	✓ 8 ✓	1522	598	1738	1752	2218	1163	
	9 ✓	1522	540	1442	1404	2198	1164	
15.4	× 10 ✓	1551	522	1968	2044	2177	1172	
	✓ 11 ✓	1539	848	1912	1977	2233	1167	
	× 12 ✓	1540	1034	1997	1982	2282	1167	
	× 13 ✓	1542	1148	2082	2038	2278	1172	
15.6	✓ 14 ✓	1572	992	1832	1823	2202	1168	
15.8	✓ 15 ✓	1580	617	1803	1828	2170	1178	
	✓ 16 ✓	1582	738	1988	1973	2218	1192	
16.0	✓ 17 ✓	1610	732	1750	1747	2218	1168	
	× 18 ✓	1600	1012	1732	1779	2242	1172	
	× 19 ✓	1606	1267	1800	1772	2338	1168	
16.2	✓ 20 ✓	1630	639	1682	1670	2207	1168	
	✓ 21 ✓	1625	638	1647	1664	2242	1170	

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1933phae.proj..1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.	
1156	9	8	—	
1030	16	16	—	
1088	45	41	—	
1120	116	104	—	
1075	139	129	—	
1105	238	215	—	
1116	430	385	—	
1029	300	292	—	
1121	955	851	—	
1059	743	702	796	×
1085	150	138	625	×
1138	606	533	746	×
1059	570	539	748	×
1074	254	236	660	×
1058	320	302	684	✓
1087	598	550	750	×
1055	582	551	751	✓
1034	244	236	660	✓
1005	832	828	837	×
1066	777	729	804	✓
1115	792	710	799	×
1106	888	803	827	×
1034	659	636	776	×
992	637	642	779	✓
1026	788	768	814	✓
1050	580	552	751	✓
1070	583	545	749	×
1170	618	528	745	×
1039	508	489	734	✓
1072	485	452	725	✓

Plates poorly centred with regard to first two or last. C&P advises taking only stars in common. Stars and magnitudes with crosses therefore imply, most of the time (but not always), that they are not within the common circle.

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1933phae.proj.1292

DJP-RK 5031 — May 11, 1933.

Strip	Star	y	x	Dep'l	Dep'l	Ce	Dk	Notes
	22	1620	680	2063	1982	2187	1174	
16.4	23	1633	968	1500	1579	2232	1163	
	24	1653	1032	1488	1442	2288	1173	
	25	1644	1103	1677	1658	2258	1174	
	26	1640	1209	1942	1992	2329	1173	
16.6	27	1658	620	1757	1643	2203	1172	
	28	1672	614	1722	1746	2211	1173	
	29	1658	803	1922	1975	2202	1172	
	30	1672	878	1643	1627	2262	1172	
	31	1669	~~1022~~ 979	2062	2080	2296	1216	
	32	1662	1080	2012	2050	2348	1228	
	33	1671	1292	1858	1896	2350	1260	
16.80	34	1690	482	1540	1504	2358	1282	
	35	1676	618	1828	1900	2356	1310	
	36	1696	749	1491	1460	2357	1302	
	37	1688	1200	2044	2072	2410	1322	
	38	1698	1340	1810	1792	2460	1329	
17.0	39	1700	754	1652	1660	2370	1340	
	40	1711	999	2110	2130	2410	1328	
17.2	41	~~1726~~	861	2241	2206	2400	1330	
	42	1728	1053	1639	1650	2461	1320	
	43	1729	1060	1889	2042	2426	1330	
	44	1731	1330	1992	1990	2436	1318	
17.4	45	1751	497	2040	2072	2396	1370	
	46	1750	1119	1390	1382	2425	1310	
	47	1741	1420	2094	2176	2452	1300	
17.6	48	1770	699	1761	1730	2318	1294	
	49	1769	881	1820	1788	2370	1282	
	50	1772	1322	2090	2080	2386	1270	
17.8	51	1789	420	2100	2042	2324	1264	

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1933phae.proj..1192

Cl.-Dk.	Dff.-Dk.	Red. Dff.	Magn.
1013	848	836	840 ✓
1069	346	324	691 ✓
1065	292	274	674 ✓
1084	493	455	726 ×
1156	794	687	791 ×
1031	528	511	741 ✓
1038	561	541	749 ✓
1030	776	754	810 ✓
1090	463	425	719 ✓
1080	855	791	823 ×
1120	803	717	800 ×
1090	617	566	755 ×
1076	240	223	655 ✓
1046	554	530	746 ✓
1055	173	164	634 ✓
1088	736	677	789 ×
1031	467	413	716 ×
1030	316	306	685 ✓
1082	792	731	803 ✓
1070	893	835	840 ×
1141	324	284	678 ✓
1096	635	580	759 ✓
1118	673	601	764 ×
1076	736	685	791 ✓
1115	76	68	571 ✓
1152	835	724	802 ×
1024	451	440	722 ✓
1088	522	480	732 ✓
1116	815	730	803 ×
1060	807	761	812 ✓

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1923phae.proj.1292

J.F.Cn. J.J. R.A. 5031 May 11, 1923

Strip	Star	y	x	Deff.	Deff	Cl.	Dk.	Volts.
	✓52✓	1798	741	2004	2002	2290	1264	
	✓53✓	1780	830	1680	1750	2352	1260	
	✓54✓	1790	908	1849	1832	2334	1262	
	✓55✓	1792	1156	1960	1900	2410	1270	
	✗56✓	1799	1314	2004	1982	2414	1280	
	✗✓57✓	1786	1380	2070	2108	2404	1268	
18.0c	✓58✓	1808	470	1910	1914	2336	1276	
	✓59✓	1800	484	1896	1888	2360	1278	
	✓60✓	1809	975	2050	2059	2320	1272	
	✓61✓	1799	1096	1359	1330	2412	1270	
	✓62✓	1812	1124	2050	2100	2372	1278	
18.2	63✓	1820	819	2068	2038	2340	1270	
~~18.4~~	✗64✓	1832	1289	2192	2170	2418	1270	
18.4	✓65✓	1851	379	1791	1734	2302	1252	
	✓66✓	1842	555	2078	2038	2290	1268	
	✓67✓	1840	849	2040	2059	2326	1268	
	✓68✓	1851	1049	1799	1780	2342	1270	
	✓69✓	1840	1142	1682	1648	2356	1260	
	✗70✓	1850	1256	1318	1312	2418	1268	
	15	1999	1032	1268	—	2360	1262	
	1	1700	810	1290	—	2338	1264	
	2	—	—	1330	—	2376	1270	
	3	—	—	1400	—	2406	1280	
	4	—	—	1430	—	2378	1272	
	5	—	—	1500	—	2392	1266	
	6	—	—	1660	—	2310	1260	
	7	—	—	1490	—	2340	1251	
	8	—	—	2140	—	2360	1250	

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1933phae.proj..1192

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
1026	739	720	800 ✓
1092	455	416	717 ✓
1072	578	539	748 ✓
1140	660	579	759 ✓
1134	713	628	773 ×
1136	821	723	801 ×
1060	636	600	764 ✓
1082	614	567	755 ✓
1048	782	746	808 ✓
1142	74	65	565 ✓
1094	797	729	802 ✓
1070	783	731	803 ✓
1148	911	794	824 ×
1050	510	485	734 ✓
1022	790	772	816 ✓
1058	781	739	805 ✓
1072	519	484	733 ✓
1096	405	369	704 ✓
1150	47	41	509 ×
1098	6	5	—
1074	26	24	—
1106	60	54	—
1126	120	107	—
1106	158	143	—
1126	234	208	—
1050	400	380	—
1089	239	220	—
1110	890	801	—

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1933phae.proj.1292

HJP - R.A. 5531 - May 12, 1933

Strip	Star	y	x	diff	diff	cc	dk	Plates
	10	2001	1033	1152	—	2193	1140	550
	1	1702	809	1168	—	2143	1139	
	2	—	—	1203	—	2157	1146	
	3	—	—	1252	—	2218	1147	
	4	—	—	1250	—	2162	1148	
	5	—	—	1368	—	2252	1145	
	6	—	—	1568	—	2202	1152	
	7	—	—	1362	—	2168	1150	
	8	—	—	1972	—	2199	1158	—
18.6	✓ 71 v	1862	747	1717	1737	2103	1157	
	✓ 72 v	1861	1077	1683	1692	2203	1158	
	x 73 v	1867	1197	1922	1947	2258	1156	
	x 74 v	1861	1279	1899	1867	2298	1162	
	x 75 v	1865	1367	1322	1313	2232	1158	
	x 76 v	1871	1391	1768	1777	2249	1162	
18.8	✓ 77 v	1889	582	1673	1653	2149	1160	
	✓ 78 v	1888	793	1874	1820	2163	1153	
	✓ 79 v	1881	832	1852	1793	2138	1159	
	✓ 80 v	1887	1036	1969	1919	2182	1153	
	x 81 v	1881	1283	1980	1898	2258	1162	
19.0	x 82 v	1900	528	1843	1840	2148	1160	
	✓ 83 v	1899	663	1880	1881	2122	1159	
	✓ 84 v	1902	677	1602	1503	2132	1158	
	x 85 v	1911	1247	1888	1892	2279	1162	
	x 86 v	1908	1289	1203	1200	2289	1157	
19.2	✓ 87 v	1930	565	1878	1895	2128	1157	
	✓ 88 v	1922	723	1888	1889	2128	1162	
	✓ 89 v	1922	1048	1913	1888	2208	1164	
	x 90 v	1918	1406	1827	1858	2192	1162	
19.4	✓ 91 v	1948	629	1420	1367	2128	1167	

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1933phae.proj..1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
1053	12	11	—
1004	24	24	—
1011	57	56	—
1071	105	98	—
1014	102	100	—
1107	223	202	—
1050	416	396	—
1018	212	208	—
1046	819	783	—
946	570	602	772 ✓
1050	534	508	743 ✓
1102	778	705	805 x
1136	721	635	782 x
1074	159	148	620 x
1087	610	561	760 x
989	503	509	744 ✓
950	694	730	814 ✓
985	669	679	796 ✓
1029	791	770	830 ✓
1096	777	709	806 x
988	681	690	800 x
963	721	749	820 ✓
974	394	405	715 ✓
1117	728	651	784 x
1132	44	39	488 x
971	729	750	821 ✓
966	726	751	821 ✓
1044	736	705	805 ✓
1030	680	660	790 x
961	226	235	660 ✓

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1933phae.proj.1992

RJP R.A. 5031 - May 12, 1933.

Strip	Star	y	x	Dyl	Dyl	Cc	Dk	Volts
	✓ 92 ✓	1951	770	1987	1938	2138	1162	
	× 93 ✓	1954	1283	1660	1692	2262	1172	
19.6	✓ 94 ✓	1973	389	1799	1858	2108	1163	
J.F.M.	× 95 ✓	1955	1643	1832	1822	2100	1168	
	✓ 96 ✓	1972	959	1614	1564	2119	1171	
	✓ 97 ✓	1961	776	1331	1339	2112	1168	
	✓ 98 ✓	1970	799	1608	1594	2159	1166	
	✓ 99 ✓	1960	975	1198	1190	2138	1168	
19.8	✓ 100 ✓	1990	791	1268	1260	2170	1170	
	× 101 ✓	1982	1270	1941	1968	2268	1172	
	× 102 ✓	1991	1330	1668	1648	2254	1170	
20.0	✓ 103 ✓	2001	550	1490	1488	2128	1172	
	✓ 104 ✓	2000	× 612	1942	1920	2148	1174	
	✓ 105 ✓	2008	728	1872	1889	2162	1172	
	✓ 106 ✓	2002	740	1438	1398	2142	1180	
	✓ 107 ✓	2008	773	1360	1370	2142	1170	
	✓ 108 ✓	2004	799	1430	1438	2202	1170	
	✓ 109 ✓	2002	830	1526	1474	2180	1178	
	✓ 110 ✓	2008	860	1338	1349	2170	1180	
	✓ 111 ✓	2010	1019	1862	1820	2174	1178	
	× 112 ✓	2008	1328	1520	1540	2234	1188	
20.2	✓ 113 ✓	2029	381	1900	1972	2130	1180	
	✓ 114 ✓	2032	590	1810	1972	2170	1190	
	✓ 115 ✓	2032	731	1928	1942	2172	1182	
	✓ 116 ✓	2020	948	1710	1670	2174	1180	
	✓ 117 ✓	2028	1101	1480	1491	2218	1172	
	× 118 ✓	2020	1382	1590	1580	2248	1188	
	4s	1999	1032	1198	—	2212	1190	
	1	1701	809	1209	—	2188	1190	
	2	—	—	1258	—	2248	1182	

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1933phae.proj..1292

Cl. – Alk.	Defl. Alk.	Red. Defl.	Magn.
976	800	826	849 ✓
1090	509	462	730 ×
945	665	704	805 ✓
942	669	710	807 ×
948	418	441	725 ✓
944	167	177	635 ✓
993	435	438	724 ✓
970	26	27	460 ✓
1000	94	94	580 ✓
1096	782	714	808 ×
1084	488	450	727 ×
956	317	332	694 ✓
974	757	778	831 ✓
990	708	715	809 ✓
962	238	247	665 ✓
972	195	200	645 ✓
1032	264	256	668 ✓
1002	322	321	691 ✓
990	163	165	630 ✓
996	663	665	791 ✓
1046	342	327	693 ×
950	756	796	839 ✓
980	701	715	809 ✓
990	753	761	826 ✓
994	510	513	744 ✓
1046	313	299	682 ✓
1060	397	374	707 ✓
1022	8	8	—
998	19	19	—
1060	70	66	—

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1933phae.proj.1292

J.F. M. J.p. R.A. 5031 May 12, 1933

Strip	Star	y	x	Diff.	Diff.	Cl.	Dk	Volts.
	3	—	—	1282	—	2236	1188	
	4	—	—	1299	—	2212	1182	
	5	—	—	1448		2236	1180	
	6	—	—	1360	—	2164	1174	
	7	—	—	1398	—	2166	1180	
	8	—	—	2038	—	2278	1182	

J.F. – R.A. 5031 – May 12, 1933

	1A	2001	1033	1211	—	2068	1208	540
	1	1702	809	1218	—	2091	1213	
	2	—	—	1253	—	2011	1209	
	3	—	—	1299	—	2042	1211	
	4	—	—	1304	—	2006	1213	
	5	—	—	1408	—	2017	1208	
	6	—	—	1553	—	2013	1210	
	7	—	—	1380	—	2003	1210	
	8	—	—	1862	—	2012	1203	
20.4	✓119	2042	819	1799	1800	2028	1205	
	✓120	2054	1057	1632	1628	2022	1206	
	×121	2040	1321	1842	1852	2102	1220	
20.6	✓122	2070	688	1529	1538	1968	1218	
	✓123	2068	919	1462	1482	2042	1219	
	✓124	2072	939	1709	1708	2023	1221	
	✓125	2059	994	1817	1762	2042	1222	
	×126	2072	1352	1804	1788	2089	1217	
20.8	✓127	2089	807	1534	1548	1980	1218	
	✓128	2082	811	1522	1529	1983	1218	
	×129	Remeasurement 2072	1357	1806	1832	2062	1218	
	×130	2083	1461	1472	1522	2123	1220	
21.0	✓131	2097	457	1722	1713	1943	1219	
	✓132	2102	472	1743	1811	1950	1223	

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1933phae.proj..1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
1048	94	910	—
1030	117	114	—
1056	268	254	—
990	386	390	—
986	218	221	—
1096	850	775	—
860	3	3	—
878	5	6	—
802	44	55	—
831	88	106	—
793	91	115	—
809	195	241	—
803	343	427	—
793	170	214	—
809	659	815	—
823	594	721	802 ✓
816	424	519	741 ✓
882	627	711	800 ×
750	315	420	713 ✓
823	253	308	679 ✓
802	487	607	767 ✓
820	567	692	791 ✓
872	579	664	783 ×
762	323	424	715 ✓
765	307	401	709 ✓
844	601	713	800 ×
903	277	307	679 ×
724	498	688	790 ✓
727	554	761	815 ✓

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1933phae.proj.1292

Kyc – CK 6001 – May 12, 1933

Trip	Star	y	x	Clefl	Clefl, Ce	Ck	Volts
	✓133	2100	492	1767	1790	1938	1220
	✓134	2100	507	1302	1310	1952	1224
	✓135	2111	578	1263	1249	1944	1219
21.2	✓136	2131	499	1358	1366	1953	1236
	✓137	2128	806	1575	1552	1962	1222
	✓138	2130	852	1768	1798	2007	1239
	✓139	2129	1090	1950	1856	2079	1230
	✓140	2129	1103	1656	1693	2061	1242
21.4	✓141	2147	410	1443	1436	1958	1238
	✓142	2151	608	1509	1489	1958	1227
	✓143	2152	900	1612	1660	2013	1242
21.6	✓144	2162	630	1768	1810	1982	1250
	✓145	2170	962	1805	1907	2022	1240
	✓146	2169	1028	1583	1520	2062	1252
	✗147	2171	1278	1880	1932	2088	1253
21.8	✓148	2191	380	1654	1702	1973	1252
	✓149	2188	681	1705	1443	2005	1209
	✓150	2182	716	1722	1709	1998	1249
	✓151	2183	762	1832	1870	1971	1258
	✓152	2180	987	1608	1699	2008	1252
	✓153	2191	1079	1720	1702	2091	1248
	✗154	2182	1321	1900	1967	2112	1253
22.0	✓155	2207	479	1753	1783	1988	1263
	✓156	2209	602	1703	1811	2010	1267
	✓157	2209	611	1571	1529	2028	1273
	✓158	2213	704	1633	1612	2022	1273
	✓159	2218	709	1662	1668	2038	1270
	✓160	2211	1118	1792	1872	2098	1272
	161	2198	1158	1912	1850	2120	1264
	✗162	2204	1379	1878	1899	2127	1267

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1933phae.proj..1292

Cl. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
718	558	777	820 ✓
728	82	113	587 ✓
725	37	51	522 ✓
720	129	179	625 ✓
740	341	461	725 ✓
768	544	708	798 ✓
849	673	794	824 ✓
819	432	528	744 ✓
720	201	279	669 ✓
731	272	372	699 ✓
771	394	510	740 ✓
732	539	736	807 ✓
782	616	788	822 ✓
810	299	369	697 ✓
835	653	781	820 ×
721	426	590	761 ✓
746	165	221	647 ✓
749	491	655	780 ✓
713	593	831	840 ✓
806	351	435	718 ✓
843	463	549	750 ✓
859	680	792	824 ×
725	505	696	793 ✓
743	515	693	792 ✓
755	247	327	685 ✓
749	349	466	726 ✓
763	390	511	740 ✓
826	560	678	787 ✓
856	617	720	802 ✓
860	621	722	803 ×

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1933phae.proj.1292

XP – RH 5031 – May 12, 1933.

Strip	Star	y	x	dlyfl	dlyfl	Cl	dk	Volts
22.2	163	2219	741	1822	1841	2072	1280	
	164	2220	850	1849	1843	2067	1281	
	165	2212	998	1808	1733	2113	1272	
	166	2221	1008	1380	1394	2093	1277	
	167	2231	1329	1308	1308	2131	1280	
22.4	168	2240	1047	1920	1922	2132	1273	
	169	2249	1050	1780	1718	2152	1281	
22.6	170	2262	613	1387	1342	2052	1271	
	171	2263	1061	1664	1610	2152	1283	
	172	2270	1382	1672	1702	2100	1281	
22.8	173	2290	649	1671	1673	2113	1270	
23.0	174	2310	478	1643	1655	2038	1271	
	175	2308	503	1838	1839	2032	1262	
	176	2306	957	1890	1908	2067	1262	
	177	2304	983	1800	1803	2092	1254	
	178	2310	1023	1812	1789	2073	1253	
	179	2306	1099	1597	1614	2118	1258	
	180	2309	1110	1881	1938	2118	1249	
23.2	181	2323	1012	1832	1832	2069	1243	
	182	2329	1103	1462	1482	2082	1251	
23.4	183	2347	467	1782	1782	1972	1242	
	184	2350	739	1750	1757	1998	1237	
	185	2350	1205	1765	1802	2112	1234	
23.6	186	2370	827	1853	1883	2003	1232	
23.8	187	2380	594	1828	1812	1987	1233	
	188	2380	1041	1742	1713	2007	1230	
24.0	189	2414	850	1382	1347	1992	1227	
	190	2410	1106	1806	1863	2022	1224	
	191	2411	1157	1600	1616	2062	1219	
24.2	192	2422	855	1467	1442	2017	1223	

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1993phae.proj..1292

Cl.-Dk.	Dff.-Dk.	Red. Dff.	Magn.
792	551	690	793 ✓
786	565	719	801 ✓
841	498	592	762 ✓
816	110	135	602 ✓
851	25	29	487 ×
859	648	755	813 ✓
871	468	537	746 ✓
781	93	119	590 ✓
869	354	408	710 ✓
869	406	467	727 ✓
783	402	514	740 ✓
767	328	427	715 ✓
770	576	748	810 ✓
805	637	791	824 ✓
838	547	653	780 ✓
820	547	657	780 ✓
865	352	407	710 ✓
869	660	760	815 ✓
826	589	713	800 ✓
831	221	266	664 ✓
730	540	740	809 ✓
761	516	678	788 ✓
878	549	625	771 ×
771	636	825	836 ✓
754	587	779	820 ✓
821	497	605	766 ✓
765	137	179	625 ✓
798	610	765	816 ×
843	389	461	725 ×
794	231	291	672 ✓

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1933phae.proj.1292

RJP – RX 5031 – May 12, 1933.

Strip	Star	Y	X	dlefl	dlefl	Cc	dk	Volts	
	×193	2420	1044	1689	1708	2023	1223		
24.4	✓194	2440	782	1500	1426	1993	1221		
	✓195	2451	792	1793	1739	1987	1222		
	✓196	2448	1017	1788	1802	1998	1223		
	×197	2450	1042	1858	1818	2007	1213		
24.6	✓198	2470	617	1652	1647	1992	1219		
	×199	2461	980	1868	1853	2008	1222		
	✓200	2461	1000	1778	1839	1988	1216		
24.8	×201	2488	1031	1868	1888	2000	1222		
25.0	✓202	2502	700	1532	1563	1978	1219		
	✓203	2500	703	1522	1541	2001	1211		
	✓204	2500	922	1572	1611	1983	1208		
25.2	×205	2521	1001	1658	1673	2012	1210		
25.4	✓206	2546	964	1530	1528	1988	1206		
	1	2001	1033	1211	—	2022	1215	525	
Plate	1	1702	809	1223	—	1948	1212		
finished	2		—	1249	—	2011	1202		
	3	—	—	1288	—	2002	1210		
	4	—	—	1300	—	1961	1203		
	5	—	—	1383	—	2011	1210		
	6	—	—	1512	—	2003	1212		
	7	—	—	1376	—	1936	1203		
	8	—	—	1820	—	1970	1223	520	

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1933phae.proj.1192

Cl.–Dk.	Dfl.–Dk.	Rd. Dfl.	Magn.
800	475	594	763 +
772	242	313	680 ✓
765	514	671	785 ✓
775	572	739	809 ✓
794	625	787	822 +
773	430	556	751 ✓
786	638	811	830 +
772	592	766	816 ✓
778	656	844	844 +
759	328	432	718 ✓
790	320	405	709 ✓
775	383	494	734 ✓
802	465	579	759 +
782	323	413	711 +
807	—	—	—
736	11	15	—
809	47	58	—
792	78	99	—
758	97	129	—
801	173	216	—
791	300	379	—
733	173	236	—
767	617	805	—

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1933phae.proj.1192

N.G.C. 6532 — May 13, 1933.

Strip	Star	y	x	Dyf	Dyf	Cc	Dk	Volts
	1A	1995	1098	1182	—	2192	1181	520
	1	1701	878	1210	—	2200	1180	
	2	—	—	1258	—	2252	1205	
	3	—	—	1287	—	2192	1200	
	4	—	—	1337	—	2219	1203	
	5	—	—	1458	—	2181	1199	
	6	—	—	1632	—	2154	1203	
	7	—	—	1432	—	2258	1204	
	8	—	—	2011	—	2257	1207	
14.4	1	1451	878	1397	1393	2200	1203	
14.6	2	1462	1072	1748	1727	2222	1198	
14.8	3	1488	735	1799	1772	2191	1203	
	4	1481	917	1502	1527	2232	1203	
15.0	5	1511	778	1628	1612	2228	1203	
	6	1517	973	1782	1788	2162	1207	
15.4	7	1541	908	1918	1932	2202	1204	
	8	1543	1097	1916	1900	2188	1211	
15.8	9	1583	678	1908	1860	2182	1212	
	10	1589	799	1982	1990	2182	1210	
	11	1578	1054	1798	1810	2209	1205	
16.0	12	1604	1078	1774	1772	2200	1206	
	13	1611	1328	1792	1762	2242	1209	
16.2	14	1635	600	1728	1728	2212	1213	
	15	1631	620	1720	1737	2226	1213	
	16	1622	642	1971	1967	2208	1209	
	17	1639	1029	1532	1532	2193	1210	
16.4	18	1648	1164	1708	1682	2232	1208	
	19	1641	1269	1944	1928	2205	1202	
16.6	20	1660	681	1702	1702	2181	1206	
	21	1662	866	1892	1853	2227	1212	

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1933phae.proj.11921

Cl.-Dk.	Defl.-Dk.	Rad.Defl.	Magn.
1011	1	1	—
1020	30	29	—
1047	53	51	—
992	87	88	—
1016	134	132	—
982	259	264	—
951	429	450	—
1054	228	216	—
1050	804	765	—
997	192	193	623 ×
1024	539	526	739 ×
988	582	590	759 ×
1029	311	302	665 ×
1025	417	407	700 ✓
955	578	605	763 ×
998	721	723	807 ✓
977	697	713	804 ×
970	672	693	795 ✓
972	776	799	839 ✓
1004	599	596	760 ×
994	567	571	752 ×
1033	568	549	745 ×
999	515	516	735 ✓
1013	515	508	733 ✓
999	760	761	823 ✓
983	322	328	673 ✓
1024	487	475	723 ✓
1003	732	730	810 ×
978	499	510	734 ✓
1015	660	650	779 ✓

See note for plate 5031.

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1933phae.proj.1292

DJP – RA 5032 – May 13, 1930.

Strip	Star	y	x	Dyff	Dxff	Cc	Dk	Volts
	✓ 22	1657	1096	1466	1443	2192	1212	
16.8	✓ 23	1698	543	1517	1477	2178	1208	
	✓ 24	1680	678	1748	1753	2188	1212	
	✓ 25	1680	940	1653	1642	2157	1208	
	✗ 26	1678	1357	1791	1802	2092	1211	
17.0	✓ gone 27	1697	457	1582	1554	2166	1191	
	✓ 28	1700	807	1382	1358	2215	1198	
	✓ 29	1701	815	1518	1518	2247	1198	
	✓ 30	1717	1058	1918	1922	2208	1202	
	✗ 31	1717	1132	2057	2073	2272	1202	
	✗ 32	1698	1398	1650	1628	2278	1205	
17.2	✗ 33	1728	919	2040	2034	2203	1196	
	✓ 34	1729	1112	1492	1502	2240	1199	
	✓ 35	1730	1120	1778	1753	2263	1195	
	✗ 36	1737	1388	1772	1750	2260	1198	
17.4	✓ 37	1757	554	1882	1908	2197	1191	
	✓ 38	1750	1178	1265	1249	2261	1192	
17.6	✓ 39	1773	757	1523	1513	2178	1191	
	40	1770	941	1618	1620	2194	1190	
	✗ 41	1776	1380	1942	1900	2240	1192	
17.8	✓ 42	1790	528	1932	1932	2230	1201	
	✓ 43	1782	890	1572	1560	2190	1207	
	✓ 44	1793	968	1720	1726	2198	1207	
	✗ 45	1797	1215	1803	1787	2170	1210	
	✗ 46	1787	1417	2057	2051	2223	1210	
	✗ ✓ 47	1788	1441	1902	1942	2222	1214	
18.0	✓ 48	1810	529	1812	1798	2178	1214	
	✓ 49	1801	545	1792	1778	2222	1216	
	✓ 50	1800	801	1892	1831	2214	1214	
	51	1810	1036	1972	1950	2222	1214	

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1933phae.proj..1292

Cl.–Dk.	Dff.–Dk.	Rd. Dff.	Magn.	
980	242	247	645	✓
970	289	298	663	✓
976	538	551	746	✓
949	439	463	719	✓
881	585	664	784	×
975	377	386	693	✓
1017	172	168	611	✓
1049	320	305	666	✓
1006	718	714	804	✓
1070	863	806	843	×
1028	439	427	707	×
1007	841	835	856	×
1041	298	286	658	✓
1068	569	533	740	✓
1062	563	530	740	×
1006	704	700	798	✓
1069	65	61	534	✓
987	327	331	674	✓
1004	429	427	707	✓
1048	729	696	796	×
1029	731	711	803	✓
983	359	365	686	✓
991	516	521	738	✓
960	585	610	766	×
1013	844	832	855	×
1008	708	702	799	×
964	591	614	766	✓
1006	569	566	750	✓
1000	647	647	778	✓
1008	747	741	815	✓

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1933phae.proj.1192

jmc. RH 5032 May 13, 1933.

Strip	Star	x	x	Defl.	Defl.	Ω	DR	Volt.
	52	1800	1156	1251	1247	2223	1210	
	53	1798	1174	2042	2018	2198	1215	
	54	1818	1185	1888	1890	2212	1212	
	55	1799	1373	1852	1838	2175	1213	
18.2	56	1827	877	1832	1848	2260	1210	
18.4	57	1858	438	1663	1668	2214	1209	
	58	1842	483	2020	2008	2192	1207	
	59	1848	614	1912	1932	2198	1210	
	60	1842	907	1892	1902	2231	1207	
	61	1851	1108	1653	1617	2200	1209	
	62	1841	1204	1531	1515	2157	1207	
	63	1851	1317	1248	1248	2218	1207	
	64	1837	1348	1982	1988	2191	1208	
18.6	65	1867	808	1823	1763	2192	1208	
	66	1861	1236	1771	1721	2178	1205	
	67	1868	1257	1932	1928	2198	1205	
	68	1863	1340	1822	1850	2220	1205	
	69	1868	1426	1360	1320	2222	1210	
	70	1872	1432	1740	1730	2192	1210	
18.8	71	1889	644	1695	1700	2182	1209	
	72	1890	856	1863	1879	2190	1210	
	73	1881	894	1880	1857	2232	1214	
	74	1890	1047	1992	1978	2192	1213	
	75	1889	1096	1950	1913	2223	1216	
	76	1890	1322	2012	2022	2198	1211	
	77	1881	1344	1862	1868	2223	1210	
	1s	1895	1098	1214	—	2192	1210	
	1	1701	870	1235	—	2178	1210	
	2	—	—	1262	—	2203	1210	
	3	—	—	1297	—	2202	1210	

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1933phae.proj..1292

Cl.–Sk.	Diff.–Sk.	Red. Diff.	Magn.
1013	39	38	484 ✓
983	815	830	853 ✓
1000	677	677	789 ✓
962	632	657	780 ✓
1050	630	600	761 ✓
1005	456	454	716 ✓
985	807	820	849 ✓
988	712	721	806 ✓
1024	690	674	788 ✓
991	426	430	708 ✓
950	316	332	675 ✓
1011	41	41	492 ✓
983	777	791	837 ✓
984	585	595	760 ✓
973	541	556	748 ✓
993	725	730	810 ✓
1015	631	621	770 ✓
1012	130	128	590 ✓
982	525	534	740 ✓
973	488	500	730 ✓
980	661	675	788 ✓
1018	654	642	776 ✓
979	772	789	835 ✓
1007	715	710	802 ✓
987	806	817	848 ✓
1013	665	656	780 ✓
982	4	4	—
968	25	26	—
993	52	52	—
992	87	88	—

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1933phae.proj.1292

gmc. RH5302 May 13, 1933.

Strip	Star	y	x	Deff	Deff	Cl	Dk	Volt
	4	—	—	1360	—	2160	1212	
	5	—	—	1443	—	2180	1208	
	6	—	—	1610	—	2140	1207	
	7	—	—	1420	—	2234	1208	
	8	—	—	1994	—	2198	1216	6.05

NJP - RH 5032 - May 13, 1933.

	18	1945	1098	1218	—	2218	1204	575
	1	1701	870	1243	—	2218	1210	
	2	—	—	1270	—	2248	1218	
	3	—	—	1309	—	2184	1219	
	4	—	—	1382	—	2212	1217	
	5	—	—	1432	—	2158	1219	
	6	—	—	1622	—	2137	1217	
	7	—	—	1430	—	2242	1218	
	8	—	—	2012	—	2193	1219	
19.0	✓ 78	1902	599	1900	1919	2182	1222	
	✓ 79	1904	726	1988	1971	2168	1213	
	✓ 80	1908	737	1573	1564	2203	1217	
	× 81	1911	1351	1262	1273	2203	1222	
19.2	× 82	1929	787	1937	1998	2184	1219	
	✓ 83	1927	1108	1947	1922	2170	1209	
	× 84	1920	1518	1788	1793	2192	1209	
19.4	✓ 85	1951	691	1424	1403	2168	1213	
19.6	✓ 86	1961	703	1903	1876	2207	1218	
	✓ 87	1968	837	1338	1322	2222	1212	
	✓ 88	1977	869	1622	1702	2197	1209	
19.8	× 89	1990	1331	1922	1913	2207	1219	
	× ✓ 90	1997	1391	1669	1672	2227	1215	
	~~19.8~~ 91	1964	1036	1242	1237	2211	1211	
	× 92	1959	1343	1672	1690	2198	1212	

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1933phae.proj.1292

R.–Dk.	Defl.–Dk.	Red. Defl.	Magn.	
948	148	156	—	
972	235	242	—	
933	403	432	—	
1026	212	206	—	
982	778	792	—	
1014	14	14	—	
1008	33	33	—	
1030	52	51	—	
965	90	93	—	
995	165	166	—	
939	213	227	—	
920	405	440	—	
1024	212	207	—	
974	793	815	—	
960	688	717	792 ✓	
955	766	803	827 ✓	
986	352	357	690 ✓	
981	46	47	500 ×	
965	748	775	814 ×	✓
961	725	754	805	
983	582	592	754 ×	✓
955	200	209	635	✓
989	706	714	792	
1010	118	117	586 ✓	
988	453	458	719	✓
988	698	707	790 ×	
1012	456	450	716 ×	
960	28	29	416 ✓	
986	469	476	723 ×	

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1933phae.proj.1292

L.JP - RK 5032 - May 13, 1933.

Strip	Star	y	x	Defl.	Defl.	cc.	Dk.	Volts
	93	1980	452	1878	1883	2192	1209	
	94	1980	821	1603	1592	2192	1208	
	95	1992	802	1280	1264	2195	1208	
20.0	96	2008	609	1495	1507	2202	1210	
	97	2007	673	1992	1959	2242	1209	
	98	2011	800	1372	1382	2247	1213	
	99	2010	834	1391	1348	2207	1213	
	100	2011	859	1452	1482	2227	1213	
	101	2010	890	1450	1483	2202	1213	
	102	2011	921	1362	1338	2207	1214	
	103	2011	1389	1514	1518	2209	1213	
20.2	104	2021	1008	1721	1740	2190	1200	
	105	2017	1080	1862	1867	2218	1211	
	106	2030	1163	1473	1476	2242	1207	
20.4	107	2048	878	1927	1928	2227	1213	
	108	2047	1382	1908	1969	2237	1207	
20.6	109	2070	981	1507	1504	2198	1208	
	110	2061	1057	1948	1900	2228	1212	
	111	2060	1117	1701	1686	2208	1213	
	112	2060	1143	1943	1968	2193	1209	
20.8	113	2073	748	1597	1600	2193	1212	
	114	2091	868	1606	1672	2182	1212	
	115	2088	871	1561	1562	2202	1203	
	116	2079	1006	1778	1768	2207	1212	
	117	2079	1443	1861	1882	2228	1209	
	118	2090	1523	1488	1504	2238	1207	
21.0	119	2101	519	1862	1866	2242	1209	
	120	2109	532	1919	1900	2207	1205	
	121	2103	552	1940	1924	2222	1213	
	122	2103	619	1289	1284	2212	1206	

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1933phae.proj..1192

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.
983	672	684	781 ✓
984	390	396	700 ✓
987	64	65	539 ✓
992	291	294	667 ✓
1033	766	741	800
1034	164	159	610 ✓
1044	126	121	589 ✓
1014	254	250	651 ✓
989	253 ~~671~~	256	654 ✓
993	136 ~~389~~	137	599 ✓
996	303 ~~64~~	304	670 ×
990	530 ~~241~~	535	740 ✓
1007	~~653~~ ~~766~~	649	770 ✓
1035	267 ~~764~~	258	654 ✓
1014	714 ~~126~~	703	788 ✓
1030	756 ~~254~~	734	798 × ✓
990	297 ~~253~~	300	669
1016	712 ~~136~~	701	788 ✓
995	480 ~~303~~	482	724 ✓
984	744 ~~530~~	756	806 ✓
981	386 ~~653~~	393	699 ✓
970	427 ~~267~~	440	713 ✓
999	358 ~~714~~	358	690 ✓
995	561 ~~756~~	564	746 ✓
1019	~~662~~ ~~297~~	650	770 ×
1031	289 ~~712~~	280	660 ×
1033	~~655~~ ~~480~~	634	766 ✓
1002	729 ~~744~~	727	796 ✓
1009	719 ~~386~~	713	791 ✓
1006	480 ~~427~~	79	553 ✓

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1933phae.proj.1192

2 gp - RA 5032 - May 13, 1930

Mag	Star	y	x	Dyel	Dyel	Ce	Ok	Notes
	123	2111	927	1938	1920	2178	1213	
21.2	124	2136	561	1392	1323	2242	1204	
	125	2118	639	1228	1228	2188	1207	
	126	2132	1163	1749	1758	2162	1207	
21.4	127	2150	462	1442	1437	2223	1203	
	128	2140	868	1637	1618	2140	1204	
	129	2137	914	1899	1919	2149	1203	
21.6	130	2169	573	2011	2073	2143	1209	
	131	2157	668	1558	1578	2172	1203	
	132	2158	689	1868	1903	2171	1203	
	133	2168	1011	1713	1672	2183	1208	
	134	2171	1090	1546	1532	2152	1208	
21.8	135	2198	439	1774	1749	2208	1208	
	136	2190	742	1382	1372	2212	1207	
	137	2190	778	1777	1782	2188	1208	
	138	2190	823	1960	1954	2240	1213	
	139	2171	1023	1908	1913	2163	1209	
	140	2188	1049	1653	1662	2216	1212	
	141	2189	1382	1902	1958	2207	1210	
22.0	142	2211	570	1832	1814	2218	1207	
	143	2212	662	1852	1876	2219	1213	
	144	2216	673	1473	1489	2228	1204	
	145	2197	1140	1752	1766	2220	1208	
	146	2215	1178	1908	1908	2237	1210	
	147	2210	1441	1932	1942	2222	1210	
22.2	148	2233	447	1790	1781	2233	1212	
	149	2219	765	1619	1611	2226	1207	
	150	2220	770	1696	1691	2213	1212	
	151	2229	803	1938	1960	2217	1212	
	152	2221	911	1864	1888	2200	1210	

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1933phae.proj..1192

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.
965	716	742	808
1038	123	118	586
981	21	21	380
955	546	572	749
1020	236	731	646
936	423	452	718
946	706	747	802
934	833	892	869
969	335	346	686
968	682	705	789
975	484	496	727
944	331	351	688
1000	553	553	743
1005	170	169	615
980	571	582	751
1027	744	725	795
954	701	735	798
1004	445	443	715
997	745	748	802
1011	616	610	760
1006	651	648	770
1024	277	270	657
1012	551	545	742
1027	698	680	780
1012	727	718	793
1021	543	531	739
999	408	408	704
1001	481	481	724
1005	737	734	798
990	666	674	779

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1933phae.proj.1292

Zyp-R+U032 – May 10, 1923

Strip	Star	y	x	Dyfl	Dyfl	Cl	Dk Volts.
	153 ✓	2218	947	1862	1841	2193	1213
	154 ✓	2219	1059	1842	1838	2249	1210
	155 ✓	2228	1070	1360	1253	2249	1210
	156 Omegaurea	2216	1180	1943	1933	2240	1213
	157 ✓	2221	1228	1470	1434	2222	1212
	158 x	2219	1289	1882	1812	2217	1204
	159 x	2234	1390	1240	1232	2227	1209
22.4	160 ✓	2251	1212	1728	1773	2203	1207
22.6	161 ✓	2270	677	1250	1253	2210	1211
	162 ✓	2270	1122	1608	1604	2246	1203
	163 x	2271	1447	1662	1667	2212	1209
22.8	164 ✓	2292	710	1690	1703	2186	1213
23.0	165 ✓	2312	566	1957	1943	2222	1212
	166 ✓	2309	1047	1932	1867	2198	1213
	167 ✓	2310	1161	1642	1658	2228	1217
	168 ✓	2310	1172	1948	1943	2178	1213
23.2	169 ✓	2313	537	1542	1578	2244	1218
	170 ✓	2330	1073	1950	1992	2212	1214
	171 ✓	2316	1087	1950	1882	2232	1218
	172 ✓	2331	1167	1439	1421	2243	1222
23.4	173 ✓	2351	528	1930	1792	2218	1218
	174 ✓	2357	800	1857	1832	2201	1213
23.6	175 x	2306	1267	1872	1912	2208	1214
23.8	176 ✓	2387	657	1963	2010	2223	1213
	177 ✓	2381	1104	1804	1816	2192	1218
24.0	178 ✓	2400	689	2003	1937	2183	1220
24.2	179 ✓	2420	912	1375	1318	2232	1213
	180 ✓	2429	919	1006	1489	2227	1217
	181 x	2423	1108	1810	1843	2184	1216
	182 x	2446	1219	1716	1662	2212	1222

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1933phae.proj..1292

Cl. – Dk.	Deff.-Dk.	Red. Deff.	Magn.
980	638	652	771
1039	630	607	758
1039	146	141	601
1027	725	706	789
1010	240	238	647
1013	643	634	764
1018	27	27	405
996	543	545	742
999	40	40	472
1043	403	387	697
1003	455	454	718
973	508	522	737
1010	738	731	797
985	686	697	785
1011	429	425	710
965	732	758	806
1026	342	334	681
998	757	758	807
1014	698	688	782
1021	208	204	633
1000	643	643	769
988	631	639	768
994	678	683	781
1010	773	765	810
974	592	608	759
963	750	778	816
1019	133	131	595
1010	271	268	657
972	610	628	764
990	467	472	722

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1933phae.proj.1292

H.P. R.A. 5032 – May 13, 1933.

Strip	Star	y	x	Diff	Diff	Cc	Dk	Plate
24.4	183	2444	845	1483	1442	2201	1218	
	184	2457	857	1838	1878	2212	1214	
24.8	185	2446	678	1720	1699	2207	1222	
25.0	186	2509	762	1605	1621	2177	1222	
	187	2504	765	1627	1614	2208	1227	
	188	2507	984	1657	1592	2171	1228	
	189	2501	1096	1909	1962	2170	1223	
25.2	190	2528	1062	1730	1687	2162	1222	
25.4	191	2557	1027	1610	1630	2177	1221	
	1	1995	1098	1223		2178	1221	510
Plate	1	1701	870	1258	—	2173	1221	
finished	2	—	—	1276	—	2188	1222	
	3	—	—	1312	—	2188	1226	
	4	—	—	1367	—	2228	1223	
	5	—	—	1480	—	2173	1228	
	6	—	—	1627	—	2148	1223	
	7	—	—	1432	—	2248	1224	
	8	—	—	2011	—	2178	1223	

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1933phae.proj..1292

Cl.–Dk.	Dff.–Dk.	Rd. Dff.	Magn.	
983	244	248	650	✓
998	644	645	770	✓
985	488	495	728	✓
955	391	410	705	✓
981	394	402	701	✓
943	396	420	709	✓
947	738	779	816	×
940	486	517	732	×
956	399	411	707	×
957	2	2	—	
952	37	39	—	
911	54	59	—	
962	86	89	—	
997	144	144	—	
953	230	241	—	
925	404	437	—	
1024	208	203	—	
955	788	825	—	

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1933phae.proj.1292

Vp - RN 4892 - May 14, 1933.

Strip	Star	y	x	Dyfl	Dxfl	Cc	Dk	Volts.
	1N	2099	927	1212	—	2072	1218	510
	1	1879	1220	1227	—	2077	1221	
	2	—	—	1250	—	2103	1223	
	3	—	—	1292	—	2108	1232	
	4	—	—	1302	—	2103	1232	
	5	—	—	1297	—	2108	1232	
	6	—	—	1544	—	2132	1238	
	7	—	—	1592	—	2142	1242	
	8	—	—	1908	—	2083	1234	
14.4		1445	889	1352	1353	2132	1249	
14.6		1440	646	1882	1878	2098	1243	
14.8		1447	1028	1920	1956	2127	1253	
		1497	1098	1493	1478	2132	1248	
		1480	1158	1962	1948	2111	1242	
		1457	854	1939	1978	2108	1231	
15.0		1502	969	1628	1593	2097	1232	

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1933phae.proj..1292

Cl.-Dk. Deff.-Dk. Red. Deff. Magn.

Reject

Reject

Reject

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1933phae.proj.1292

Dif - R.A. 4892 - May 14, 1933

Strip	Star	y	x	Dyfl	Dyfl	Ce	Dk	Volts
	1A	2100	919	1219	—	2128	1218	510
	1	1880	1212	1232	—	2108	1219	
	2	—	—	1249	—	2156	1218	
	3	—	—	1285	—	2120	1218	
	4	—	—	1295	—	2103	1219	
	5	—	—	1372	—	2118	1217	
	6	—	—	1523	—	2122	1214	
	7	—	—	1592	—	2138	1216	
	8	—	—	1883	—	2093	1224	
✓	1	1442	869	1332	1377	2079	1223	
✓	2	1456	848	1995	1962	2097	1222	
✓	3	1479	709	2000	2020	2078	1222	
✓	4	1477	1003	2036	1972	2098	1222	
✓	5	1489	1001	1992	1992	2088	1223	
✓	6	1480	1148	2001	1971	2087	1222	
✓	7	1497	1088	1487	1499	2103	1218	
✓	8	1501	962	1677	1696	2078	1221	
	9	1551	1024	1756	1764	2113	1222	
✓	10	Too faint						
✓	11	1560	697	1948	1936	2106	1217	
✓	12	1588	907	2010	1937	2107	1214	
✓	13	1611	683	1808	1808	2082	1218	
✓	14	1611	809	1809	1818	2078	1219	
✓	15	1623	869	1762	1744	2088	1222	
✓	16	1661	1342	1267	1272	2082	1219	
✓	17	1668	458	1827	1880	2121	1218	
✓	18	1663	608	1738	1701	2058	1218	
✓	19	1670	578	1997	2027	2107	1213	
✓	20	1660	719	1946	1954	2078	1216	
	21	1731	454	1596	1590	2093	1218	

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1933phae.proj..1292

El.–Dk.	Dff.–Dk	Red. Dff.	Magn.
910	1	1	—
889	13	15	—
938	31	33	—
902	67	74	—
884	76	86	—
901	155	172	—
908	309	340	—
922	376	408	—
869	659	758	—
856	432	154	632 ✓
875	756	864	853 ✓
856	788	920	off curve ✓
876	780	892	off curve ✓
865	769	876	856 ✓
865	764	882	858 ✓
885	275	312	697 ✓
857	466	544	766 ✓
891	538	601	782 ✓
889	724	818	838 ✓
893	560	628	789 ✓
864	640	701	809 ✓
859	595	695	807 ✓
866	530	612	784 ✓
863	50	58	568 ✓
903	636	704	810 ✓
840	502	600	782 ✓
894	799	894	off curve ✓
862	735	851	846 ✓
875	375	428	736 ✓

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1933phaer.proj.1292

HP RH 4892 – May 14, 1933.

Strip	Star	y	x	Defl	Defl	Cc	Dk	Volts
✓	22	1747	610	1617	1574	2092	1217	
✓	23	1740	883	1898	1861	2104	1218	
✓	24	1737	909	1708	1727	2113	1219	
✓	25	1730	1408	1912	1863	2081	1214	
✓	26	1797	461	1237	1252	2082	1216	
✓	27	1792	514	1682	1682	2078	1218	
✓	28	1771	604	1878	1909	2083	1217	
✓	29	1770	628	1920	1866	2103	1222	
✓	30	1770	759	1942	1902	2077	1222	
✓	31	1771	763	1863	1792	2104	1213	
✓	32	1800	932	1982	1864	2073	1224	
✓	33	1784	989	1952	1912	2068	1221	
✓	34	1816	690	1703	1657	2121	1217	
✓	35	1799	692	1658	1637	2104	1217	
✓	36	1813	723	1750	1751	2093	1222	
✓	37	1793	1288	1234	1248	2118	1219	
✓	38	1842	1419	1393	1381	2093	1219	
✓	39	1861	702	1767	1743	2108	1219	
✓	40	1878	998	1950	1926	2062	1222	
✓	41	1864	1103	1669	1656	2058	1223	
✓	42	1879	1238	1837	1830	2082	1222	
✓	43	1907	1348	1554	1529	2108	1223	
✓	44	1890	1450	1223	1223	2077	1219	
✓	45	1879	445	1902	1922	2108	1219	
✓	46	1905	517	2013	1902	2108	1222	
✓	47	1909	522	1578	1590	2132	1223	
✓	48	1907	538	1587	1548	2115	1224	
✓	49	1921	579	1814	1842	2111	1222	
✓	50	1934	603	1655	1592	2137	1232	
	51	1921	611	1695	1672	2095	1231	

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1993phae.proj.1292

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.
875	379	433	787
886	662	750	821
894	499	557	770
867	674	780	828
866	28	32	523
860	464	527	763
866	677	780	828
881	666	750	822
855	700	818	828
891	565	632	790
849	699	821	838
847	711	840	844
904	463	512	756
887	428	493	752
871	528	606	784
899	22	25	505
874	168	192	648
889	536	606	784
840	716	853	846
835	439	525	762
860	612	713	813
886	320	362	727
858	04	05	250
889	693	782	828
886	736	832	842
909	361	397	738
891	344	385	724
889	606	687	816
905	392	432	736
864	453	522	761

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1933phae.proj.1292

2 Gp – R.A. 4892 – May 14, 1933.

Strip	Star	y	x	Dfl	Dfl	Cl	Sk	Notes
	52		Too faint					
✓	53	1939	768	1922	1803	2117	1226	
	54		Too faint					
✓	55	1938	905	1911	1832	2107	1227	
✓	56	2011	422	1822	1872	2122	1226	
✓	57	2038	462	1918	1888	2122	1229	
✓	58	2018	531	2098	1993	2132	1229	
✓	59	2003	611	1375	1368	2107	1222	
✓	60	2007	617	1702	1637	2067	1227	
✓	61	2004	881	1941	1911	2071	1228	
✓	62	2028	1139	1667	1669	2102	1223	
✓	63	2020	1139	1278	1300	2093	1222	
	64		Too faint					
	65		Too faint					
✓	66	2083	1008	1922	1903	2107	1225	
	67	2100	1018	2004	1942	2098	1226	
	68		Too faint					
✓	69	2134	392	1358	1372	2138	1222	
✓	70	2140	491	1528	1542	2142	1228	
✓	71	2151	602	1568	1552	2172	1227	
✓	72	2150	1331	1358	1355	2089	1223	
✓	73	2151	1347	1751	1729	2109	1224	
✓	74	2207	1347	1937	1952	2107	1222	
	75	2203	508	1658	1629	2109	1223	
	76		Too faint					
✓	77	2227	888	1912	1900	2105	1227	
✓	78	2258	1017	1538	1560	2118	1222	
✓	79	2260	1078	1755	1758	2143	1228	
	80	2260	1142	1389	1387	2107	1222	
	81		Too faint					

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1933phae.proj.1292

Cl.–Dk.	Defl.–Dk.	Red. Defl.	Magn.
891	662	742	819
880	645	733	816
896	621	693	806
893	674	753	823
903	817	905	off curve
885	150	169	639
840	443	528	762
843	698	827	840
879	445	507	756
871	67	770	~~826~~
882	687	779	828
872	747	857	849
916	143	156	633
914	307	336	706
945	333	352	714
866	133	154	684
885	516	582	778
929	722	780	828
886	421	473	746
878	679	770	826
896	327	366	718
915	528	578	776
885	166	185	646

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1933phae.proj.1292

QP-R 4892 - May 14, 1933

Strip	Year	Y	D	Dyl	Dyl	Cc	Dk	Date
✓	82	2271	399	1470	1472	2143	1226	
✓	83	2280	1200	1678	1658	2093	1227	
✓	84	2319	1109	1468	1572	2097	1226	
✓	85	2381	802	1267	1276	2097	1226	
	86			Too faint				
✓	87	2421	528	1548	1583	2092	1226	
✓	88	2420	924	1776	1778	2072	1226	
✓	89	2429	966	~~1493~~ 1793	1527	2082	1227	
✓	90	2411	1097	1823	1778	2093	1227	
✓	91	2456	1053	1552	1622	2100	1224	
✓	92	2479	738	1521	1510	2082	1228	
	93			Too faint				
	~~14~~ 1	2100	919	1230	—	2063	1226	
	~~15~~ 1	1880	1212	1231	—	2103	1222	
	~~16~~ 2	—	—	1248	—	2129	1221	
	~~17~~ 3	—	—	1281	—	2132	1223	
	~~18~~ 4	—	—	1305	—	2103	1218	
	5	—	—	1432	—	2098	1219	
	6	—	—	1532	—	2114	1222	
	7	—	—	1606	—	2098	1222	
	8	—	—	1933	—	2072	1222	505

Pole Spindle

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1933phae.proj..1292

Cl.–Dk.	Dff.-Dk.	Red. Dff.	Magn.
917	245	268	680 ✓
866	441	510	757 ✓
874	297	341	708 ✓
874	49	56	566 ✓
			718 ✓
869	317	364	~~566~~
846	551	652	795 ✓
855	283	332	~~653~~
866	573	662	705 ✓
876	363	415	799 ✓
854	288	337	739 ✓
			707 ✓
840	7	8	—
881	9	10	—
908	27	30	—
909	58	64	—
885	87	98	—
879	213	242	—
892	310	347	—
876	384	438	—
850	711	836	—

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1933phae.proj.1292

2 Jp - D + 4893 - May 15, 1933.

Strip	Star	y	x	Dpl	Dpll	cc	Dk	Volts.
	1s	2098	937	1172	—	2128	1172	525
	1	1873	1229	1203	—	2103	1174	
	2	—	—	1210	—	2176	1172	
	3	—	—	1261	—	2159	1178	
	4	—	—	1301	—	2168	1182	
	5	—	—	1434	—	2122	1188	
	6	—	—	1605	—	2143	1184	
	7	—	—	1618	—	2136	1187	
	8	—	—	1993	—	2128	1192	
14.4	1	1403	888	1388	1378	2148	1194	
14.6	2	1467	866	1997	2001	2137	1201	
15.0	3	1511	981	1682	1653	2127	1189	
	4	1503	1104	1498	1482	2158	1192	
	5	1511	1229	1703	1712	2159	1193	
15.6	6	1561	1042	1816	1799	2152	1202	
15.8	7	1582	1203	2072	2051	2181	1202	
16.2	8	1621	701	1934	1932	2139	1203	
	9	1622	827	1897	1812	2188	1202	
	10	1634	889	1758	1792	2118	1203	
16.4	11	1651	1059	1288	1200	2197	1201	
16.6	12	1677	527	1819	1771	2177	1203	
	13	1670	738	2022	2041	2148	1202	
16.8	14	1680	477	1929	1892	2178	1201	
17.4	15	1743	473	1707	1678	2178	1203	
	16	1757	851	1912	1922	2182	1206	
	17	1748	918	1767	1762	2163	1204	
	18	1739	1427	2010	1922	2192	1198	
17.6	19	1759	630	1616	1602	2168	1203	
17.8	20	1786	624	1920	1904	2149	1202	
	21	1781	648	1952	1893	2196	1198	

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1933phae.proj..1292

Cl.–Sk.	Defl.-Sk.	Red. Defl.	Magn.
956	0	0	—
979	29	30	—
1001	38	38	—
981	83	85	—
986	119	121	—
934	246	264	—
959	421	439	—
949	431	454	—
936	801	856	—
954	189	198	616 ✓
936	798	850	837 ✓
938	479	510	741 ✓
966	298	308	658 ✓
966	540	558	754
950	606	639	775 ✓
979	860	880	850 ✓
936	730	778	811 ✓
906	652	720	793 ✓
915	572	625	773
996	93	94	598 ✓
974	592	609	769 ✓
946	830	878	849 ✓
977	709	722	793 ✓
975	489	501	739 ✓
926	711	768	811 ✓
959	560	586	763 ✓
994	768	770	808 ✓
965	406	420	708 ✓
947	710	750	802 ✓
998	725	735	798

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1933phae.proj.1292

QP - RL 4893 - May 10, 1933

Strip	Star	y	x	dyC	dyL	Cl	Dk Halt
	✓ 22	1783	783	1882	1858	2158	1198
	✓ 23	1797	1008	2018	1973	2177	1203
18.0	✓ 24	1868	481	1252	1209	2139	1200
	✓ 25	1807	533	1722	1731	2168	1201
	✓ 26	1810	711	1704	1712	2174	1201
	✓ 27	1808	952	1948	1938	2124	1201
	✓ 28	1802	1308	1228	1218	2172	1203
18.2	✓ 29	1828	708	1762	1654	2138	1203
	✓ 30	1827	742	1797	1798	2148	1198
18.4	✓ 31	1851	1439	1982	1891	2182	1202
18.6	✓ 32	1872	771	1848	1763	2142	1208
	33	1873	1122	1688	1697	2147	1198
18.8	✗ 34	1872	882	1982	1953	2140	1202
	✓ 35	1887	1017	1932	1937	2139	1200
	✓ 36	1888	1258	1872	1897	2162	1198
	✓ 37	1898	1470	1201	1202	2158	1198
19.0	✓ 38	1913	1368	1537	1545	2172	1197
19.2	✓ 39	1920	543	1090	1072	2137	1189
	✓ 40	1918	557	1064	1063	2147	1198
	✓ 41	1937	600	1833	1746	2138	1194
	✓ 42	1931	632	1677	1649	2162	1200
19.4	✓ 43	1948	622	1637	1563	2132	1192
	✓ 44	1948	427	1877	1801	2093	1200
19.6	✓ 45	1961	1109	1827	1831	2127	1193
20.2	✓ 46	2031	441	1854	1803	2162	1192
	✓ 47	2029	552	1949	1961	2143	1193
	✓ 48	2014	631	1423	1362	2187	1193
	✓ 49	2018	697	1722	1810	2148	1192
	✓ 50	2031	1159	1267	1240	2140	1196
20.4	✓ 51	2051	481	1952	1937	2140	1193

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1933phae.proj..1292

Cl. – Dk.	Deff.-Dk.	Red. Deff.	Magn.
960	672	700	788
974	793	812	823
939	56	60	560
967	525	542	750
973	507	520	743
923	742	803	820
969	20	21	480
935	505	539	749
950	600	631	773
980	184	188	612
934	498	532	746
954	499	520	743
938	766	816	825
939	734	786	815
964	686	712	792
960	04	04	300
975	344	352	677
948	398	413	704
954	371	390	695
944	596	632	773
962	463	481	732
940	408	433	713
893	639	715	793
934	636	678	786
970	636	653	778
950	762	802	819
994	199	200	617
956	574	601	767
944	58	61	561
947	751	793	815

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1983phae.proj.1292

Zp - P 4893 - May 15, 1933

Strip	Star	y	x	dyfl	dxfl	cc	dk	Palt
20.8	✓52	2080	1203	2004	2011	2152	1192	
21.0	✓53	2100	762	1943	1963	2137	1189	
	✓54	2092	1028	1968	1832	2089	1192	
	✓55	2108	1038	1950	1928	2163	1188	
	✗✓56	2105	1459	1952	2018	2169	1188	
21.4	✓57	2149	412	1393	1337	2189	1188	
	✓58	2152	511	1508	1490	2148	1188	
21.6	59	2162	622	1592	1522	2142	1192	
	✓60	2161	1352	1342	1320	2142	1192	
	✓61	2161	1368	1781	1702	2127	1180	
22.2	✓62	2220	368	1924	2009	2168	1183	
	✓63	2216	528	1727	1660	2189	1188	
22.4	✓64	2252	419	1512	1472	2176	1182	
22.6	✓65	2267	1039	1584	1520	2142	1177	
	✓66	2270	1099	1772	1747	2198	1181	
	✓67	2269	1163	1411	1363	2173	1183	
22.8	✓68	2283	420	1498	1477	2169	1183	
	✓69	2290	1222	1662	1639	2190	1189	
23.8	✓70	2391	824	1239	1272	2122	1179	
24.2	✓71	2433	548	1648	1551	2152	1182	
	✓72	2429	947	1776	1736	2153	1178	
	✓73	2439	988	1458	1458	2162	1178	
	✓74	2421	1118	1812	1863	2152	1184	
24.8	✓75	2489	709	1522	1505	2123	1172	
25.6	76	2550	798	1912	1897	2132	1182	
	1	2098	937	1181	—	2108	1182	520
	1	1873	1279	1198	—	2189	1182	
	2	—	—	1219	—	2193	1183	
	3	—	—	1263	—	2182	1182	
	4	—	—	1297	—	2155	1176	

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1933phae.proj..1292

Cl. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
960	816	850	837
948	764	804	822
897	708	788	814
975	751	772	808
981	797	810	823
1001	177	175	606
960	311	324	665
950	365	384	693
950	139	147	598
947	562	581	762
985	783	796	816
1001	506	505	740
994	310	311	660
965	350	363	673
1017	579	570	758
990	199	200	616
986	305	310	660
1001	461	459	723
943	77	81	573
970	418	431	712
975	576	589	764
984	280	284	648
968	654	672	783
951	342	360	680
950	722	760	805
926	—	—	—
1007	16	16	—
1010	36	36	—
1000	81	81	—
979	121	124	—

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1933phae.proj.1292

Strip	Star	y	x	dyf	dyf	cc	dk	Plates
Plate	5	—	—	1466	—	2127	1167	
finished	6	—	—	1582	—	2142	1176	
	7	—	—	1600	—	2122	1182	
	8	—	—	1973	—	2132	1176	

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1933phae.proj..1292

Cl.–Dk.	Deff.–Dk.	Red. Deff.	Magn.
960	299	312	—
979	409	418	—
940	468	497	—
956	797	234	—

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1933phae.proj.1292

NGC - R.A. 4981 - May 15, 1933.

Scrip	Star	y	x	Defl	Defl	Cc	Dk	Volts
	1N	2108	931	1153	—	1937	1152	535
	1	1887	1222	1162	—	1937	1153	
	2	—	—	1178	—	1913	1153	
	3	—	—	1212	—	1903	1156	
	4	—	—	1222	—	1947	1168	
	5	—	—	1333	—	1942	1160	
	6	—	—	1468	—	1898	1167	
	7	—	—	1492	—	1908	1168	
	8	—	—	1748	—	1907	1162	
14.6	✓1	1459	839	1243	1242	1922	1163	
15.0	✓2	1510	1059	1062	1062	1870	1162	
15.2	✓3	1518	936	1052	1052	1880	1163	
	✓4	1518	1181	1049	1619	1877	1158	
15.6	✓5	1563	997	1632	1638	1882	1164	
16.2	✓6	1628	664	1779	1814	1930	1171	
	7	1628	779	1689	1701	1921	1171	
16.4	✓8	1640	839	1648	1680	1902	1172	
	✓9	1653	312	1208	1207	1903	1167	
16.8	✓10	1681	429	1704	1708	1917	1172	
	✓11	1681	479	1628	1616	1912	1168	
17.4	✓12	1750	426	1563	1520	1890	1165	
	✓13	1703	803	1723	1747	1903	1169	
	✓14	1750	870	1592	1583	1908	1171	
17.6	✓3 m.m.	1760	585	1498	1510	1911	1168	
17.8	✓16	1792	578	1810	1752	1922	1162	
	17	1788	600	1792	1790	1949	1168	
	✓18	1790	732	1708	1732	1908	1155	
18.0	✓19	1811	432	1178	1180	1910	1155	
	✓20	1840	485	1589	1621	1928	1168	
	21	1812	663	1565	1572	1912	1158	

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1933phae.proj..1192

Cl. – Dk.	Dff. – Dk.	Red. Dff.	Magn.
785	1	1	—
784	9	11	—
760	25	33	—
747	56	75	—
779	54	69	—
782	173	221	—
731	301	413	—
790	324	410	—
745	586	787	—
759	79	104	595
708	400	568	766
717	364	503	746
719	426	591	777
718	468	652	796
759	625	824	847
750	524	700	812
730	507	690	809
736	41	56	549
745	534	720	817
744	~~452~~ 377	606	782
725	379	520	703
734	566	768	829
737	417	565	768
743	326	438	728
760	619	812	842
781	623	795	836
753	565	751	825
755	24	32	510
760	437	575	762
754	410	542	760

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1933phae.proj.1292

m.m. — RH 4987 - May 15, 1937.

Trip	Star	Y	X	Dcll	Dcll	Cc	Dk	Balts
	22	1809						
	~~1809~~	1258	~~1260~~ 660	1172	1170	1882	1161	
	23	1830						
18.2	~~1830~~	660	1580	1580	1602	1912	1155	
	24	1831	697	1672	1721	1931	1166	
18.4	25	1852	1390	1318	1362	1930	1158	
18.8	26	1879	721	1692	1648	1955	1161	
	27	1879	1077	1558	1588	1889	1159	
	28	1890	1210	1742	1828	1921	1160	
19.0	29	1900	1421	1168	1270	1909	1160	
19.2	30	1928	492	1469	1511	1925	1165	
	31	1922	508	1499	1545	1905	1162	
	32	1920	1320	1462	1532	1912	1160	
19.4	33	1939	552	1650	1672	1908	1162	
	34	1951	575	1542	1508	1900	1160	
	35	1939	582	1548	1552	1910	1163	
	36	1948	878	1689	1683	1858	1161	
19.6	37	1968	1102	1761	1722	1879	1165	
20.2	38	2019	582	1370	1308	1900	1162	
	39	2020	589	1570	1582	1908	1166	
	40	2035	1110	1210	1200	1881	1172	
20.4	41	2040	396	1759	1778	1911	1151	
~~21.4~~	42	2150	865	1297	1278	1939	1168	
21.6	43	2158	463	1438	1451	1902	1162	
	44	2168	572	1470	1451	1882	1160	
	45	2163	1307	1285	1290	1890	1162	
	46	2161	1320	1748	1718	1889	1168	
	47	2162	1321	1638	1625	1909	1162	
22.2	48	2220	481	1552	1550	1910	1162	
22.6	49	2258	371	1422	1448	1908	1165	
	50	2270	991	1551	1552	1872	1161	
	51	2275	1051	1632	1728	1888	1163	

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1933phae.proj..1192

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
721	10	11	20 ~~72~~
757	436	573	772
765	530	692	809
772	182	236	656
794	509	639	793
730	410	559	767
761	625	821	844
749	09	12	440
760	325	427	723
743	360	484	742
752	337	442	729
746	499	669	807
740	360	487	743
747	387	517	752
697	525	754	826
714	577	808	840
738	178	242	657
742	410	552	764
709	33	466	735
760	617	811	842
771	120	155	623
740	282	381	708
722	300	415	721
728	126	173	630
721	565	786	834
747	472	630	789
748	389	520	753
743	270	363	713
711	391	550	763
725	514	712	814

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1933phae.proj.1292

m. m. — RH 4987 — May 15, 1937.

Strip	Star	Y	X	dyf	dyf	Ce	Dk	Volts
22.6	cont. 52	2272	1118	1338	1317	1862	1160	
22.8	53	2291	1175	1599	1588	1864	1161	
23.8	54	2396	778	1208	1218	1908	1158	
24.2	55	2430	900	1662	1702	1892	1168	
	56	2422	1070	1672	1692	1890	1161	
24.4	57	2438	502	1499	1482 very poor edge	1910	1163	
	58	2440	549	1410	1461	1862	1157	
24.6	59	2468	1029	1485	1525	1865	1162	
24.8	60	2492	712	1457	1522	1901	1160	
	1/5	2108	931	1170	—	1882	1168	
	1	1887	1222	1171	—	1921	1172	
	2	—	—	1198	—	1902	1163	
	3	—	—	1212	—	1882	1151	
	5	—	—	1318	—	1880	1160	
	4	—	—	1232	—	1912	1168	
	6	—	—	1438	—	1888	1170	
	7	—	—	1521	—	1922	1167	5.20
	8	—	—	1739	—	1892	1168	

Data finished > note.

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1933phae.proj..1292

Cl. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
702	167	238	657
703	433	615	784
750	55	74	673
724	514	710	813
729	521	716	817
747	327	437	727
705	378	534	757
703	343	487	742
741	330	444	729
714	2	3	
749			
739	35	47	
731	61	83	
720	158	219	
744	64	86	
718	268	373	
755	354	469	
724	571	788	

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1933phae.proj.1192

DLJ- RH 4988 - May 16, 1933.

Step	Star	y	x	Dyfl	Dyfl	cc	dlk	Volts.
	1A	2102	951	1140	—	2163	1134	520
	1	1888	1239	1142	—	2177	1139	
	2	—	—	1172	—	2107	1137	
	3	—	—	1208	—	2118	1139	
	4	—	—	1242	—	2142	1142	
	5	—	—	1352	—	2107	1143	
	6	—	—	1638	—	2109	1153	
	7	—	—	1622	—	2188	1152	
	8	—	—	1937	—	2142	1152	
14.6	x 1*	1467	863	1332	1351	2178	1153	
15.2	√ 2	1523	909	1644	1633	2163	1162	
	√ 3	1516	1082	1420	1452	2114	1159	
	√ 4	1521	1208	1702	1732	2152	1163	
15.6	√ 5	1570	1021	1742	1747	2118	1163	
16.2	√ 6	1633	680	1947	1978	2138	1163	
	√ 7	1631	803	1987	1907	2171	1157	
16.6	√ 8	1659	1338	1229	1240	2122	1158	
16.8	√ 9	1693	453	1918	1924	2203	1158	
	√ 10	1690	505	1774	1841	2183	1160	
17.4	√ 11	1748	1404	2017	2042	2208	1160	
17.6	√ 12	1759	452	1678	1720	2172	1162	
	√ 13	1771	609	1641	1632	2163	1162	
	√ 14	1708	896	1803	1745	2168	1162	
18.0	√ 15	1799	604	1989	1943	2158	1153	
	√ 16	1798	761	1897	1909	2162	1152	
	√ 17	1811	1287	1178	1178	2162	1148	
18.2	√ 18	1820	460	1172	1170	2192	1147	
	√ 19	1821	572	1767	1727	2157	1146	
	√ 20	1821	691	1622	1662	2124	1145	
18.4	√ 21	1840	488	1710	1718	2104	1149	

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1933phae.proj..1292

Cl. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
1029	6	6	—
1038	3	3	—
970	35	36	—
979	69	70	—
1000	100	100	—
1014	209	206	—
956	485	501	—
1036	470	454	—
990	785	793	—
1025	189	185	631 8x ✓ under circle
1001	476	474	738 26 ✓
961	283	294	674 69 ✓
989	579	585	775 63 ✓
955	581	610	783 73 ✓
975	799	819	855 ✓
1014	780	780	837 ✓
964	76	79	573 ✓
1045	763	726	815 ✓
1023	648	631	780 ✓
1048	870	830	861 ✓
1010	537	528	744 ✓
1001	475	473	727 ✓
1006	612	610	773 ✓
1005	813	809	850 ✓
1010	751	742	820 ✓
1014	30	29	516 ✓
1045	24	23	504 ✓
1011	601	595	766 ✓
979	497	508	738 ✓
955	565	592	798 60 ✓

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1938phae.proj.1192

Dyp - C44988 - May 16, 1938.

Strip	Star	y	x	Δyell	Δyell	Cc	Δc	Plate
	22	1840	722	1801	1812	2181	1149	
18.6	23	1860	1417	1382	1356	2202	1147	
18.8	24	1888	701	1758	1812	2162	1147	
	25	1883	1102	1700	1723	2163	1148	
	26	1897	1238	1936	1938	2122	1151	
19.0	27	1904	1449	1148	1149	2182	1152	
19.2	28	1934	0522	1067	1063	2147	1146	
	29	1931	0537	1045	1023	2152	1137	
	30	1921	1348	1542	1512	2128	1139	
19.4	31	1949	0579	1800	1842	2132	1142	
	32	1948	611	1768	1738	2132	1141	
19.6	33	1961	602	1067	1070	2120	1142	
	34	1957	907	1803	1882	2113	1140	
	35	1971	1140	1812	1877	2128	1138	
20.2	36	2028	612	1328	1382	2158	1132	
20.2	37	2030	618	1690	1708	2172	1138	
	38	2031	618	1681	1758	2125	1141	
20.4	39	2048	422	1858	1908	2162	1132	
	#40	2040	1138	1208	1178	2105	1128	
21.0	41	2102	1008	1968	2000	2132	1132	
21.6	42	2162	393	1287	1280	2151	1135	
	43	2165	490	1506	1488	2148	1129	
	44	2177	592	1512	1648	2148	1132	
	45	2168	1333	1285	1282	2102	1133	
	46	2166	1350	1878	1898	2141	1132	
	47	2170	1351	1771	1752	2112	1130	
21.8	48	2231	510	1678	1718	2148	1138	
22.6	49	2278	1021	1600	1620	2138	1142	
22.8	50	2280	1081	1778	1762	2132	1138	
	51	2278	1145	1352	1328	2092	1139	

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1923phae.proj..1792

Cl. – Ok.	Defl.-Ok.	Red. Defl.	Magn.
1032	657	638	782
1055	222	210	639
1015	638	628	729
1015	564	557	754
971	786	807	849
1030	—		x too bright
1001	419	416	706
1015	397	392	~~349~~ 700
989	388	392	~~349~~ 710
990	679	684	797
991	612	615	774
978	426	436	715
973	728	748	823
990	707	712	809
1026	224	216	642
1034	561	544	750
984	579	589	764
1030	751	729	815
977	65	66	560
1000	852	852	872
1016	152	150	612
1019	365	358	689
1016	448	440	715
969	151	156	615
1009	756	750	824
982	632	641	783
1010	560	552	752
996	468	471	727
994	632	635	782
953	201	211	640

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1933phae.proj.1192

m.m – RH 4988 – May 16, 1933.

Strip	Star	y.	x.	Dyl.	Dyl.	Cl.	Dk.	Volts.
23.0	52	2299	1202	1682	1672	2102	1145	
23.0	53	2405	808	1210	1202	2092	1160	
24.2	54	2430	1102	1798	1865	2102	1152	
24.4	55	2438	930	1768	1732	2092	1148	
	56	2450	971	1471	1508	2083	1152	
24.6	57	2475	1059	1609	1662	2109	1158	
25.0	58	2500	742	1552	1528	2108	1161	
	1s	2102	951	1168	—	2158	1168	
	1	1588	1239	1175	—	2151	1162	
	2	—	—	1191	—	2110	1158	
	3	—	—	1262	—	2148	1155	
	4	—	—	1265	—	2158	1160	
	5	—	—	1415	—	2152	1162	
	6	—	—	1538	—	2122	1158	
	7	—	—	1690	—	2178	1161	
	8	—	—	1942	—	2192	1166	5.10

Plate finished.

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1923phae.proj..192

Cl. – Dk.	Decl. – Dk.	Red. Decl.	Magn.
957	532	556	734 ✓
932	46	49	543 ✓
950	680	715	810 ✓
944	602	638	783 ✓
931	338	363	693 ✓
951	478	501	734 ✓
947	379	400	701 ✓
990	0	0	—
989	13	13	—
952	33	35	—
993	107	108	—
998	105	105	—
990	253	256	—
964	380	394	—
1017	529	521	—
1026	776	757	—

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1933phae.proj.1192

Nyp - RA 0117 - May 26, 1933.

Strip	Star	y	x	dlyl	dlyl	Ce	dk	Falts
	1A	2057	1053	1340		2097	1338	0525
	1	1690	1009	1362	—	2062	1332	
	2	—	—	1409	—	2042	1343	
	3	—	—	1441	—	2043	1329	
	4	—	—	1478	—	2038	1332	
	5	—	—	1558	—	2087	1339	
	6	—	—	1766	—	2104	1337	
	7	—	—	1532	—	2097	1338	
	8	—	—	~~2088~~	—	~~1968~~ 2109	1342	
14.6	1	1463	1078	1888	1873	1998	1339	
15.2	2	1518	1032	1899	1868	2022	1341	
15.4	3	1550	662	1878	1882	2018	1342	
	4	1547	738	1867	1792	2000	1351	
	5	1542	778	1862	1863	2012	1340	
	6	1551	1199	1574	1532	2004	1338	
	7	1539	1333	1882	1852	2022	1337	
	8	1540	1347	1812	1902	2008	1335	
15.8	9	1589	828	1550	1522	1997	1341	
	10	1584	1401	1839	1817	2017	1339	
16.2	11	1622	1218	1450	1453	2056	1341	
16.4	12	1651	828	1443	1443	2012	1337	
	13	1657	1030	1558	1562	2026	1337	
16.6	14	1661	852	1673	1608	2026	1342	
	15	1669	895	1708	1761	2021	1340	
	16	1671	1048	1603	1572	2042	1342	
	17	1662	1097	1828	1834	2064	1342	
16.8	18	1688	643	1859	1814	2048	1342	
	19	1692	761	1860	1856	2072	1323	
	20	1692	1449	1797	1820	2032	1342	
17.0	21	1710	805	1787	1792	2049	1342	

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1933phae.proj..1292

Cl-Dk	Dkfl-Dk	Red. Dkfl.	Magn.
759	2	3	—
730	30	41	—
699	66	94	—
714	112	157	—
706	146	207	—
748	219	293	—
767	429	558	—
759	194	255	—
767	626	818	—
659	541	820	839 ✓
681	543	798	820 ✓
671	538	802	822
649	479	738	788 ✓
672	522	775	807 ✓
666	185	278	638 ✓
685	530	772	806 ✓
673	522	775	807 ✓
656	170	258	630 ✓
678	489	723	782 ✓
715	111	155	572
675	106	157	574 ✓
689	223	324	652 ✓
684	298	436	681
681	420	616	739 ✓
700	246	355	660 ✓
722	489	677	762 ✓
706	490	693	769 ✓
749	525	701	773
690	466	675	761 ✓
705	448	637	747 ✓

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1933phae.proj.1292

NP – RA 5117 – May 26, 1933.

Strip	Star	Y	X	Dyl	Dyl	Cc	Dk	Volts
	22	1711	858	1834	1850	2078	1339	
	23	1701	991	1762	1728	2070	1342	
	24	1698	1019	1904	1917	2053	1343	
17.2	25	1729	600	1884	1848	2052	1343	
	26	1731	682	1948	1948	2068	1342	
	27	1722	1219	1922	1899	2017	1342	
	28	1719	1451	1677	1654	2008	1338	
17.4	29	1749	684	1459	1448	2059	1341	
	30	1741	1221	1663	1686	2032	1341	
17.6	31	1768	962	1712	1693	2039	1349	
17.8	32	1792	1058	1793	1762	2032	1338	
	33	1787	1242	1856	1850	2030	1343	
	34	1790	1329	1422	1420	2087	1338	
18.0	35	1812	652	1656	1685	2122	1347	
	36	1801	889	1952	1940	2103	1343	
18.2	37	1817	736	1090	1062	2117	1337	
18.4	38	1840	1497	1834	1848	2088	1343	
18.6	39	1852	1582	1682	1684	2078	1343	
18.8	40	1891	819	1811	1806	2108	1348	
	41	1850	1538	1840	1812	2088	1351	
19.0	42	1900	1333	1580	1572	2042	1338	
19.2	43	1921	603	1943	1996	2118	1344	
	44	1929	1024	1457	1453	2069	1342	
	45	1928	1047	1804	1799	2107	1341	
	46	1919	1053	1950	1938	2092	1344	
	47	1921	1203	1868	1812	2056	1340	
	48	1933	1362	1483	1462	2062	1339	
19.4	49	1940	1012	1882	1904	2100	1346	
19.6	50	1970	622	1878	1908	2132	1343	
19.8	51	1982	1078	1743	1727	2088	1341	

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1933phae.proj.1292

ce-Dk	Defl-Dk	Red Diff	Magn
739	503	671	760
728	403	554	716
710	567	799	820
709	523	739	789
726	~~568~~ 696	837	844
675	568	840	846
670	~~418~~ 328	490	698
718	~~329~~ 113	158	574
691	~~364~~ 389	482	694
690	~~446~~ 353	511	703
694	440	633	744
687	510	742	790
754	88	116	546
775	323	416	674
760	603	795	817
780	239	307	547
745	498	669	758
735	340	462	688
760	460	605	734
737	475	645	748
704	238	339	565
774	626	809	825
727	113	156	572
766	461	602	733
748	600	803	822
716	500	700	772
729	133	184	590
754	547	727	783
789	500	698	770
747	394	528	707

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1933phae.proj.1292

Dyp-R+5117- May 26, 1933

Trip	Star	y	x	Dyfl	Dyfl	Cc	Dk	Faits
20.0	52	2003	881	1394	1397	2061	1351	
	53	2001	1029	1779	1758	2042	1344	
20.2	54	2028	853	1892	1902	2062	1346	
	55	2021	1104	1857	1860	2088	1344	
20.4	56	2040	683	1929	1922	2077	1349	
	57	2057	1113	1847	1850	2073	1347	
20.6	58	2057	1352	1544	1522	2052	1342	
20.8	59	2090	1082	1461	1472	2068	1339	
21.0	60	2112	529	1890	1844	2147	1348	
	61	2102	778	1883	1905	2123	1343	
21.2	62	2131	598	1818	1827	2122	1343	
	63	2189	702	1622	1600	2168	1343	
21.4	64	2140	1207	1661	1693	2032	1338	
	65	2150	1238	1881	1804	2020	1345	
21.8	66	2177	1293	1852	1862	2037	1344	
22.0	67	2210	1142	1911	1882	2083	1348	
22.2	68	2221	851	1900	1913	2090	1353	
	69	2221	1400	1002	1004	2077	1352	
22.6	70	2253	598	1852	1870	2153	1350	
	71	2270	827	1482	1482	2083	1346	
22.8	72	2288	688	1822	1811	2102	1343	
23.2	73	2318	705	1913	1883	2118	1349	
23.4	74	2332	578	1908	1927	2103	1347	
	75	2348	649	1722	1702	2058	1349	
	76	2340	779	1718	1688	2073	1347	
	77	2350	1204	1072	1538	2109	1343	
23.8	78	2380	031	1882	1887	2078	1348	
24.0	79	2397	552	1492	1484	2058	1349	
	80	2398	557	1676	1682	2078	1347	
	81	2400	1112	1428	1429	1992	1344	

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1933phae.proj..1192

Ce Dk	Dpl-Dk	Ked Dpl	Magn
710	45	63	482
698	424	607	735
716	551	770	805
744	514	690	767
728	577	591	730
726	501	690	767
710	191	255	632
729	127	174	584
799	519	649	750
760	551	723	782
779	479	615	738
825	268	335	654
694	339	391	669
675	523	621	740
693	528	760	800
735	548	747	793
737	573	778	808
725	151	208	602
803	511	635	745
737	86	117	546
759	473	623	741
769	549	712	776
756	571	757	798
709	363	512	703
726	356	490	698
666	195	293	642
730	536	732	786
709	139	196	597
726	332	457	687
648	84	130	556

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1933phae.proj.1292

DJP - RA 5117 - May 26, 1933

Strip	Scan	Y	X	Dyf	Dyf	Cc	Dk	Volts	
	✓ 82	2410	1158	1790	1768	1989	1347		
	✓ 83	2401	1237	1480	1478	1978	1348		
24.2	✓ 84	2423	1218	1088	1629	2012	1347		
	✓ 85	2420	1188	1727	1723	1962	1342		
	✓ 86	2414	762	1389	1374	2047	1343		
24.4	✓ 87	2451	638	1350	1351	2058	1342		
	✓ 88	2451	795	1676	1682	2038	1344		
25.2	89	2511	747	1409	1398	2068	1338		
	1A	2057	1053	1348	—	2091	1343	520	
	1	1690	1009	1445	—	2047	1352		
Set	2	—	—	1408	—	2067	1342		
	3	—	—	1457	—	2041	1343		
Finished	4	—	—	1491	—	2043	1357		
	5	—	—	1559	—	2082	1344		
	6	—	—	1738	—	2073	1343		
	7	—	—	1528	—	2107	1350		
	8	—	—	1937	—	2072	1353		

Finis of +2s Program

¡Gracias a Dios!

¡y como!

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1933phae.proj..1192

Cl dk	dkgl-dk	Red dkgl	mgn
642	432	671	760 ✓
630	131	208	603 ✓
665	261	393	668 ✓
620	383	616	738
704	39	54	463 ✓
716	8	10	320 ✓
689	325	485	695 ✓
735	67	91	526 ✓
748	5	7	—
695	63	91	—
725	66	91	—
698	114	163	—
686	134	196	—
738	209	283	—
730	395	538	—
757	178	236	—
739	604	820	—

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1933phae.proj.1292

m.m — RH 5407 — Dec. 23, 1933.

Stip	Star	y	x	Defl.	Cl.	Dk.	volt.
15.6	√1	1570	800	1632	2000	1192	
	√2	1560	1018	1568	2010	1178	
15.8	√3	1598	920	1222	1972	1170	
16.0	√4	1619	710	1338	1952	1172	
16.2	√5	1635	840	1492	1940	1162	
16.6	√6	1662	498	1488	1952	1152	
	√7	1660	648	1402	1962	1162	
16.8	√8	1678	401	1178	1932	1140	
	√9	1682	648	1722	1922	1152	
	√10	1682	881	1238	1951	1152	
17.0	√11	1710	835	1300	1952	1142	
	√12	1710	1138	1708	1962	1150	
	√13	1708	1220	1472	2000	1150	
	√14	1718	1268	1190	1972	1148	
17.2	√15	1721	788	1610	1932	1150	
	√16	1730	788	1400	1921	1140	
17.6	√17	1758	880	1050	1928	1132	
17.8	√18	1798	492	1192	1892	1148	
	√19	1791	576	1642	1922	1150	
	√20	1780	1050	1400	1930	1136	
18.0	√21	1801	560	1460	1892	1128	
	√22	1810	770	1162	1892	1128	
18.2	√23	1822	518	1148	1898	1132	
	√24	1820	618	1200	1898	1128	
18.4	√25	1850	350	~~1402~~ 1228	1902	1122	
	√26	1850	512	1210	1902	1112	
	√27	1852	918	1562	1898	1110	
	√28	1840	1010	1458	1895	1118	
18.8	√29	1896	790	1380	1901	1122	
	√30	1890	842	1600	1908	1122	

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1933phae.proj..192

Cl.–Obs.	Obs.–Obs.	Red. Obs.	Magn.
808	440	545	
832	390	469	
802	52	65	
780	166	213	
778	330	424	
795	331	416	
800	240	300	
792	38	48	
770	570	740	
799	86	107	
810	158	195	
812	558	686	
850	322	379	
824	42	51	
782	460	588	
781	260	333	
796	418	525	
744	44	59	
772	492	638	
794	264	332	
764	332	434	
764	34	45	
766	16	21	
770	72	94	
780	106	136	
790	98	124	
788	452	574	
777	340	437	
779	258	331	
786	478	608	

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1933phaeproj.1292

M. M. – RH 5407 – Dec. 23, 1933.

Strip	Star	y	x	Defl.	Cl.	Dk.	Volts
19.0	√31	1900	882	1581	1900	1110	
	√32	1912	912	1378	1888	1110	
19.2	√33	1922	1042	1212	1912	1108	
	√34	1935	1060	1468	1891	1105	
19.4	√35	1950	634	1740	1898	1120	
	√36	1950	818	1158	1889	1130	
19.6	√37	1965	~~1160~~ 1070	1570	1898	1120	
	√38	1965	1333	1489	1932	1121	
18.8	√39	1981	862	1181	1888	1112	
	? 40	1988	1032	1621	1861	1108	
	√41	1988	1052	1281	1908	1110	
20.0	√42	2010	352	1450	1882	1110	
	√43	2005	590	1262	1881	1108	
	√44	2010	818	1551	1872	1110	
	√45	2000	1052	1382	1910	1118	
	√46	2008	1131	1528	1900	1121	
	√47	2000	1290	1550	1900	1132	
	√48	2002	1362	1162	1900	1122	
20.4	√49	2042	497	1458	1910	1128	
20.6	√50	2060	488	1468	1888	1128	
	√51	2070	568	1190	1908	1121	
	√52	2075	810	1681	1892	1140	
	√53	2076	952	1381	1942	1142	
	√54	2060	1061	1440	1910	1112	
	√55	2060	1220	1202	1932	1138	
	√56	2078	1236	1192	1921	1150	
20.8	√57	2090	730	1398	1868	1132	
	√58	2080	1106	1162	1900	1142	
	√59	2090	1141	1178	1892	1138	
	√60	2090	1288	1650	1920	1142	

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1933phae.proj..1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
790	471	596	
778	268	344	
804	104	129	
786	363	462	
778	620	796	
759	28	37	
778	450	578	
811	368	454	
776	69	89	
753	513	681	
798	171	214	
772	340	440	
773	154	199	
762	441	579	
792	264	334	
779	407	522	
768	418	544	
778	40	51	
782	330	421	
760	340	447	
787	69	88	
752	541	719	
800	239	299	
798	328	411	
794	64	81	
771	42	54	
736	266	362	
758	20	26	
754	40	53	
778	508	653	

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1933phae.proj.1292

m.m. — RH 5457 — Dec. 23, 1933.

Slip	Star	y	x	Deff.	Cl.	Dk.	Volt.
21.0	✓61	2105	933	1151	1932	1132	
	✓62	2103	1118	1412	1930	1129	
21.2	✓63	2132	593	1147	1905	1138	
	✓64	2127	832	1588	1924	1143	
	✓65	2118	952	1467	1950	1150	
	✓66	0120	1070	1168	1952	1148	
21.4	67	2150	676	1705	1932	1143	
	✓68	2142	702	1508	1938	1148	
21.6	✓69	2170	830	1458	1922	1152	
	✓70	2160	899	1548	1930	1150	
21.8	✓71	2196	588	1632	1932	1156	
	✓72	2184	841	1523	1928	1152	
22.0	✓73	2208	410	1722	1942	1162	
	✓74	2210	856	1338	1928	1152	
	✓75	2205	1140	1330	1956	1158	
22.2	✓76	2228	667	1578	1898	1152	
22.4	77	2245	1200	1908	1966	1161	
22.6	✓78	2270	626	1578	1928	1158	
	? 79	2275	982	1463	1956	1161	
22.8	✓80	2291	688	1300	1912	1158	
	✓81	2283	921	1358	1942	1156	
	✓82	2277	995	1372	1958	1152	
23.0	✓83	2300	974	1681	1943	1158	
	✓84	2310	1057	1635	1948	1160	
23.2	✓85	2325	661	1545	1928	1156	
23.4	86	2352	630	1872	1932	1161	
	✓87	2350	780	1412	1912	1168	
	✓88	2355	1048	1388	1928	1161	
23.8	✓89	2391	583	1642	1922	1158	
	✓90	2390	1002	1568	1932	1152	

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1933phae.proj..1292

Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
800	19	24	
801	283	353	
767	29	12	
771	445	578	
800	317	396	
804	20	25	
789	562	713	
790	360	456	
770	306	398	
780	398	510	
776	476	614	
776	371	478	
780	560	719	
776	186	240	
798	172	216	
746	366	490	
805	747	929	
770	20	26	
795	302	380	
754	142	188	
786	202	257	
806	220	273	
785	523	666	
788	475	603	
772	389	504	
771	711	921	
744	244	328	
767	227	296	
764	484	634	
780	416	534	

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1933phae.proj.1292

M.M. — RH 5407 — Dec. 23, 1933.

Ship	Star	y	x	Deff.	Cl.	Dk.
	91	2403	750	1659	1902	1150
24.2	✓92	2437	1048	1682	1932	1158
24.4	✓93	2456	1131	1232	1958	1166
24.6	✓94	2465	998	1458	1932	1152
24.8	✓95	2483	647	1448	1928	1149
25.0	✓96	2505	802	1430	1922	1156
25.2	97	2522	780	1572	1921	1144
	98	2530	800	1692	1900	1149
	✓99	2530	962	1600	1910	1146

Plate Finished

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1933phae.proj..1192

Cl.-Dk.	Defl.-Dk.	Rd. Defl.	Magn.
752	489	650	
774	524	677 ✓	
792	66	83 ✓	
780	306	392 ✓	
779	299	384 ✓	
766	274	358 ✓	
777	428	550	
751	543	723	
764	454	594 ✓	

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1933phae.proj.1292

N.G. – R.A. 5408 – Dec. 26, 1933

Strip	Span	y	x	Dyff	Ce	Dy
15.8	✓1	1587	792	1437	1958	1037
	2	1588	1063	1662	1989	1034
16.2	3	1632	688	1668	1953	1048
	4	1632	828	1667	1970	1050
16.6	5	1666	600	1583	1948	1058
	✓6	1670	677	1328	1970	1062
	✓7	1658	723	1392	1983	1058
	✓8	1668	742	1502	1967	1064
	✓9	1677	800	1288	1967	1066
	10	1671	1119	1562	1992	1063
16.8	✓11	1690	443	1229	1982	1080
	✓12	1677	512	1467	1958	1072
	✓13	1681	588	1192	1990	1070
	✓14	1692	922	1303	2007	1070
	✓15	1691	1223	1304	2020	1077
17.2	✓16	1722	779	1542	1994	1078
17.4	✓17	1702	609	1348	1982	1073
	✓18	1708	893	1107	2018	1073
	19	1740	1018	1732	2012	1082
17.6	✓20	1770	832	1538	2028	1082
	✓21	1758	995	1562	2040	1089
	✓22	1759	1058	1239	2011	1089
	✓23	1767	1222	1343	2050	1083
	✓24	1761	1241	1372	2078	1088
17.8	✓25	1787	942	1802	2043	992
	✓26	1781	1148	1492	2023	993
	✓27	1796	1193	1728	2023	1100
18.0	✓28	1814	411	1530	1957	1092
	✓29	1803	471	1191	1962	1092
	30	1800	579	1680	1997	1077

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1933phae.proj..1192

Cl.-Dk.	Diff.-Dk.	Red. Diff.	Magn.
921	400	434	
955	628	657	
905	620	685	
920	617	671	
890	525	590	
908	266	293	
925	334	361	
903	438	485	
901	222	246	
929	499	537	
902	149	165	
886	395	446	
920	122	133	
937	233	248	
943	227	241	
916	464	506	
909	275	302	
945	84	89	
930	650	699	
946	456	482	
951	473	498	
922	150	163	
967	260	269	
990	284	287	
1051	810	770	
1030	499	484	
923	628	680	
865	438	506	
870	99	114	
920	603	655	

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1933phae.proj.1292

XJ- R.A. 5408- Dec. 26, 1930

Strip	Star	y	x	dxfl	ce	dy
18.2	31	1821	1458	1763	2107	1092
18.4	✓32	1852	538	1670	1982	1091
	✓33	1841	1062	1239	2013	1084
18.6	✓34	1874	877	1542	2026	1093
	✓35	1870	1280	1282	2069	1088
18.8	✓36	1896	406	1583	1952	1087
	✓37	1897	422	1483	1973	1082
	38	1877	937	1658	2022	1082
19.0	✓39	1906	874	1568	2018	1079
	40	1901	1078	1792	2013	1082
19.2	✓41	1936	1188	1453	2027	1080
	42	1917	1358	1666	2082	1072
19.4	✓43	1950	452	1409	1962	1062
	✓44	1947	563	1431	1983	1058
	✓45	1948	637	1458	1960	1054
19.6	46	1963	524	1583	1963	1052
	✓47	1976	655	1128	1962	1049
	✓48	1971	688	1238	1970	1042
	✓49	1973	1323	1458	2012	1035
19.8	✓50	1988	442	1492	1946	1028
	✓51	1987	483	1212	1977	1032
	52	1989	712	1693	1958	1022
	✓53	1990	1226	1358	2002	1022
	✓54	1979	1241	1150	1966	1013
	✓55	1980	1358	1082	2002	1012
20.0	✓52	2010	627	1200	1883	957
	✓57	2002	1085	1440	1888	943
	58	2009	1132	1658	1882	942
	59	2009	1163	1522	1872	932
	60	2010	1179	1658	1895	929

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Cl. – Dk.	Defl. – Dk.	Red. Defl.	Magn.
1015	671	661	
891	579	650	
929	155	167	
933	449	481	
981	194	198	
865	496	574	
891	401	450	
940	576	613	
939	489	520	
931	710	763	
947	353	373	
1010	594	588	
900	397	441	
925	373	403	
906	404	446	
911	531	583	
913	79	87	
928	196	211	
977	423	433	
918	464	506	
945	180	191	
936	671	717	
980	336	343	
953	137	144	
990	570	576	
926	293	317	
945	497	526	
940	708	754	
940	590	628	
966	729	755	

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NP - R.A. 5408 - Dec. 26, 1933.

Mag	Star	y	x	dlyl	Ce	dl
20.2	✓61	2020	659	1502	1833	922
	✓62	2029	1067	1268	1868	918
20.4	✓63	2050	343	1027	1812	913
	✓64	2049	1057	1362	1832	911
20.6	✓65	2067	362	1018	1822	908
	66	2072	709	1572	1806	903
20.8	✓67	2078	417	1483	1813	900
	✓68	2090	585	1097	1789	899
	✓69	2091	703	987	1818	898
21.0	✓70	2110	1127	1303	1839	903

Repeat NP - R.A. 5408 - Dec. 26, 1933.

21.0	✓70a	2111	1127	1167	1708	759
2	✓71	2098	1382	1198	1691	753
21.2	✓72	2133	613	959	1628	753
	✓73	2122	666	1218	1658	758
	✓74	2120	727	1003	1681	758
	✓75	2128	783	1073	1652	752
	✓76	2129	802	1212	1654	752
	✓77	2131	979	1068	1698	758
	78	2130	1037	1417	1662	757
	79	2123	1167	1430	1692	753
21.6	80	2170	951	1307	1663	758
21.8	✓81	2177	892	900	1652	753
	82	2182	793	1304	1643	754
	✓83	2192	858	1069	1661	762
	✓84	2187	910	908	1682	763
	85	2183	973	1387	1688	769
22.0	✓86	2212	822	807	1672	758
	✓87	2204	1139	778	1700	750
	✓88	2200	1152	786	1692	748

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Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
911	580	637	
950	350	368	
899	114	127	
921	451	490	
914	110	120	
903	669	740	
913	583	635	
890	198	222	
920	89	97	
936	400	427	
949	408	430	
938	445	475	
875	206	236	
900	460	511	
923	245	266	
900	321	357	
902	460	510	
940	310	330	
905	660	730	
939	677	721	
905	549	606	
899	147	164	
889	550	619	
899	307	342	
919	145	158	
919	618	673	
914	49	54	
950	28	29	
944	38	40	

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WP - RH 5408 - Dec. 26, 1933

Strip	Star	y	x	dlgl	cc	dk
22.4	✓90	2251	581	792	1632	747
	✓91	2252	729	993	1628	732
	✓92	2248	807	970	1667	721
	✓93	2240	817	801	1657	717
	✓94	2244	824	907	1598	728
	95	2252	832	1360	1692	730
	✓96	2252	868	1072	1650	718
	✓97	2254	961	1172	1640	713
	✓98	2238	969	757	1646	716
	✓99	2263	1088	1050	1653	712
	✓100	2240	1316	742	1673	711
22.6	✓101	2270	601	920	1607	707
	✓102	2262	658	908	1627	713
	✓103	2274	768	1080	1618	712
	✓104	2263	799	1069	1622	710
22.8	✓105	2299	733	840	1592	707
	106	2298	1002	1364	1617	712
23.0	✓107	2302	547	780	1623	712
	✓108	2308	797	1200	1630	718
	✓109	2302	923	963	1637	721
	✓110	2300	962	1203	1653	712
	✓111	2302	973	803	1633	707
	✓112	2308	1058	787	1638	708
	✓113	2302	1228	818	1683	699
23.2	✓114	2320	468	768	1602	693
	✓115	2321	788	732	1572	698
	✓116	2314	817	1032	1603	698
	✓117	2329	1127	1338	1640	698

Cont. in Bk 95, page 190

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Cl.-Dk.	Defl.-Dk.	Red. Defl.	Magn.
885	45	51	
896	261	292	
940	243	258	
940	84	89	
870	179	206	
962	630	655	
932	354	380	
927	459	495	
933	44	47	
941	338	359	
962	31	32	
900	213	237	
924	205	222	
906	368	406	
912	359	394	
885	133	150	
905	652	721	
911	68	75	
912	482	529	
916	242	264	
921	491	533	
926	96	104	
930	79	85	
984	119	121	
909	75	83	
874	34	39	
905	334	369	
942	640	680	

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