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Technical Note

1975-66

L. G. Taff

A Combined
Photometric-Astrometric Catalog

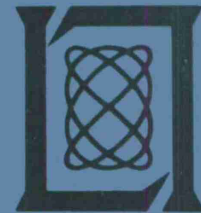
19 December 1975

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Lincoln Laboratory

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LEXINGTON, MASSACHUSETTS



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FOR THE COMMANDER

A handwritten signature in cursive script that reads "Eugene C. Raabe".

Eugene C. Raabe, Lt. Col., USAF
Chief, ESD Lincoln Laboratory Project Office

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A COMBINED PHOTOMETRIC-ASTROMETRIC CATALOG

L. G. TAFF

Group 94

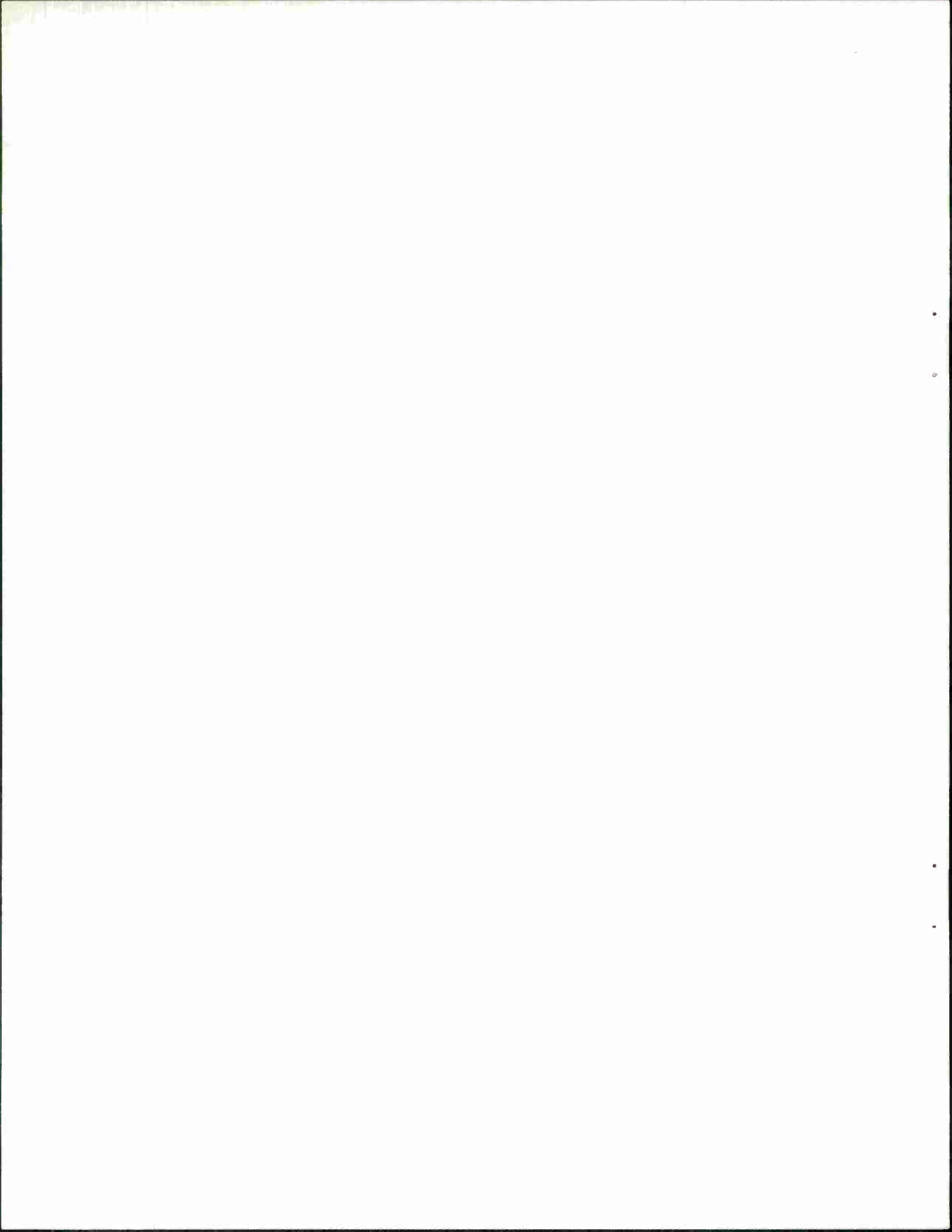
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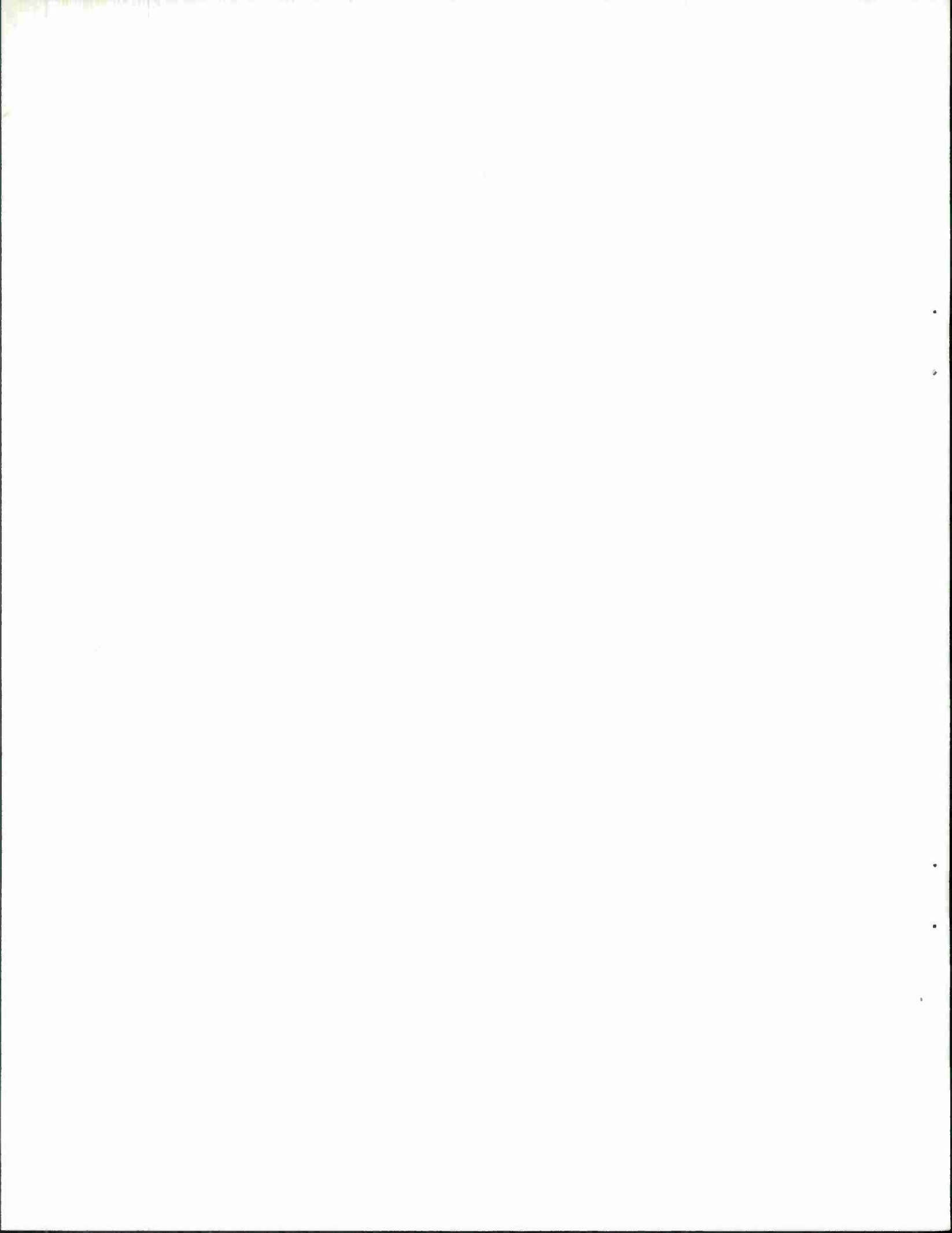
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ABSTRACT

A compilation catalog containing UBVR photometry, 1976.0 positions, and 1976.0 proper motions for 873 stars of the FK4 is presented. In addition, multiple identifications (FK4#, HD#, GC#, DM#) are included.



A COMBINED PHOTOMETRIC-ASTROMETRIC CATALOG

I INTRODUCTION

Lincoln Laboratory is currently engaged in the construction and software development for a semi-automatic electro-optical observatory. An important function will be astrometric and photometric observations of artificial earth satellites. In the process of calibration the collection of astrometric and photometric data on other celestial objects will be an important by-product. For reasons connected with maximizing the semi-automatic nature of the observatory and the design of the photometer both astrometric and photometric standard stars are required. The possibility of a combined catalog was investigated. The result is presented here.

II. CONSIDERATIONS

The routine observing program that we are anticipating and the equipment that we are installing places some limitations on the nature of the stars to be used as astrometric or as photometric standards. However, the need for a reasonable number of bright stars distributed over the entire sky is still present. Thus, our first inclination was to use the 1535 stars of the FK4 catalog (Fricke and Kopff¹) as astrometric standards.*

Next, consideration was given to the construction of a set of photometric standards that will allow us to tie into the UBVRI system. After a preliminary survey of bright stars, non-variable stars, and stars

* It is our intention to use the Smithsonian Astrophysical Observatory Star Catalog (1966) for differential measurements. However, for absolute pointing of the telescope a fundamental catalog is needed.

sufficiently diverse in color was performed, we realized that there were enough stars within the FK4 to satisfy our requirements. Thus, a compilation catalog of the UBVRI photometry of the FK4 stars was constructed and is presented here (Table 1).

III. CATALOG CONSTRUCTION

One of the problems we encountered in compiling the catalog was the multiplicity of names for various stars. Although every effort has been made to insure the accuracy of the entries listed in Table 1, this catalog is a compilation catalog, not a fundamental catalog. Thus, since we hope the information presented will be generally useful to the astronomical community, an effort was made to provide maximum alternative designations for each star. This will also allow rapid, unambiguous reference to the original sources of our data.

As the FK4 catalog was our primary source both the name and FK4 number are included here. Further identification is provided by the Boss² General Catalogue number (GC#), the Henry Draper Catalogue number (HD#), and the Durchmusterung number (DM#). The right ascensions and declinations for epoch 1976.0 listed here are accurate to $0^{\text{S}}.001$ and $0''.01$ respectively. The proper motions in right ascension ($^{\text{S}}/\text{cent}$) and declination ($''/\text{cent}$) are also included. All of the positional data comes from the FK4. It has been updated using the formulas in the Introduction to the FK4.

Except for stars which are primary or secondary standards of the UBV system (Johnson³) photoelectric and spectral type data were obtained

from the catalog of Blanco et al.⁴ The V magnitudes and B-V, U-B colors listed here represent simple averages of the entries in Blanco et al. Known corrections (Ochsenbein⁵) and obvious typographical errors in the GC or Blanco catalogs have not been propagated here. This is especially true of misidentifications. The V-R and V-I colors have been taken from Iriarte et al.⁶

Table 1 contains information for 873 of the FK4 stars. The remaining stars were either variable, eclipsing binaries, close binaries ($12''.5 > a > 1''.0$), or without photoelectric data.

IV. CATALOG DESCRIPTION

Columns 1 and 2 contain the number of the star in the FK4 catalog and its name as given there. Columns 3 and 5 contain the positional data for 1976.0 and columns 4 and 6 the respective proper motions as of 1976.0. Columns 7 - 12 contain the star's V magnitude, its UBVRI colors, and its spectral type. Columns 13 - 16 contain the GC, HD, and DM numbers. An asterisk immediately following the GC number indicates that the star is a primary or secondary UBV standard.

The catalog will be most useful in machine readable form. It can be obtained in this form by communicating with the author. The reasons I have presented the full printed version here are (i) it allows the reader to ascertain the actual contents, and (ii) with this information he can decide the usefulness of the catalog relative to his own needs, furthermore (iii) for those readers who only desire a small subset of the 873 stars presented here (e.g., G type stars with UBVRI photometry) the needed information is at hand immediately.

TABLE 1

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
905	2 CET	0	2	30.629	0.172	-17	28	10.44	-0.41
1	ALP AND	0	7	8.563	1.039	+28	57	28.87	-15.83
2	RET CAS	0	7	53.224	6.815	+59	1	3.00	-17.67
3	FPS PHE	0	8	11.826	1.233	-45	52	47.52	-17.71
4	22 AND	0	9	3.982	0.063	+45	56	19.80	0.48
5	THE SCL	0	10	30.885	1.351	-35	16	2.57	12.61
1004	CHI PEG	0	13	21.447	0.669	+20	4	24.02	0.49
1005	SIG AND	0	17	4.095	-0.525	+36	39	8.59	-3.50
1006	RET TUC	0	18	49.802	26.984	-65	0	56.91	116.73
1008	41 PSC	0	19	21.619	-0.024	+ 8	3	25.48	1.35
1009	RHO AND	0	19	51.083	0.512	+37	50	9.06	-3.38
1010	44 PSC	0	24	10.267	-0.100	+ 1	48	24.74	-1.17
11	RET HYI	0	24	30.862	68.038	-77	23	21.74	32.73
12	ALP PHE	0	25	6.035	1.866	-42	26	10.58	-39.02
1012	48 PSC	0	26	57.691	0.126	+16	18	44.95	-1.11
15	LAM1 PHE	0	30	15.708	1.426	-48	56	9.89	2.60
16	KAP CAS	0	31	37.310	0.024	+62	47	58.55	0.27
18	PT AND	0	35	35.620	0.127	+33	35	14.80	-0.02
17	RET CAS	0	35	37.471	0.211	+53	45	54.34	-0.50
19	FPS AND	0	37	16.957	-1.741	+29	10	54.10	-24.90
21	ALP CAS	0	39	8.087	0.637	+56	24	21.67	-2.72
1015	MU PHE	0	40	11.655	-0.165	-46	12	59.63	0.53
23	FTA PHE	0	42	16.785	-0.023	-57	35	40.36	1.56
22	RET CET	0	42	23.079	1.627	-18	7	5.37	3.64
26	LAM2 SCL	0	43	2.543	2.025	-38	33	13.42	12.07
25	OR1 CAS	0	43	22.774	0.191	+48	9	12.01	-0.26
28	DEL PSC	0	47	26.082	0.561	+ 7	27	17.00	-4.61
1020	64 PSC	0	47	42.829	-0.015	+16	48	40.68	-20.03
31	LAM HYI	0	47	45.766	3.524	-75	3	14.17	-2.74
1021	MU AND	0	48	29.009	0.179	+40	56	54.61	-1.61
30	PHI2 CET	0	48	55.401	-1.563	-10	46	23.89	-22.30
1022	20 CET	0	51	46.789	0.040	- 1	16	27.69	-1.30
34	LAM TUC	0	54	6.801	0.211	-69	39	24.22	-4.07
33	MU AND	0	55	24.892	1.292	+38	22	10.26	3.70
35	ALP SCL	0	57	26.994	0.133	-29	29	13.16	0.46
1026	SIG SCL	1	1	17.678	0.596	-31	40	51.53	1.67
36	FPS PSC	1	1	41.705	-0.541	+ 7	45	40.46	2.78
37	26 CET	1	2	34.766	0.781	+ 1	14	18.55	-3.76
39	TOT TUC	1	6	21.838	1.107	-61	54	11.62	-0.49
1030	MU CAS	1	6	39.783	39.591	+54	48	11.65	-158.28
1031	HPS PHE	1	6	42.160	0.329	-41	36	54.44	0.90
40	FTA CET	1	7	22.882	1.450	-10	18	32.87	-13.28
42	RET AND	1	8	22.935	1.460	+35	29	37.43	-10.97
1032	CHI PSC	1	10	9.563	0.268	+20	54	26.83	-0.61
43	TAU PSC	1	10	20.004	0.559	+29	57	45.47	-3.17

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4	
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER	
4.54	-0.05	-0.12	0.03	0.00	R9IV	225132	23	-18	6417	905
2.07	-0.10	-0.40	-0.02	-0.12	R9P	35A	127	28	4	1
2.27	0.34	0.10	0.31	0.52	F2IV	432	147	58	3	2
3.87	1.01	0.85	0.75	1.27	K0III	496	158	1	57	3
5.03	0.40	0.26	0.41	0.70	F2II	571	169	45	17	4
5.24	0.45	0.00			F4V	739	202	-35	42	6
4.80	1.58	1.92	1.33	2.45	M2III	1013	270	19	27	1004
4.52	0.06	0.07	0.08	0.08	A2V	1404	362	35	44	1005
4.24	0.57	0.02			G2V	15A1	401	-65	13	10
5.36	1.34	1.53			GK3	1635	413	7	36	1008
5.15	0.43	0.00			F5IV	1671	425	37	45	1009
5.75	0.86	0.55			GG5	2114	496	1	57	1010
2.80	0.62	0.11			G2IV	2151	503	-77	16	11
2.39	1.09	0.87	0.81	1.40	K0III	2261	519	-42	116	12
6.09	1.61	2.05			GK5	2436		15	63	1012
4.76	0.01	0.04			A0V	2834	619	-49	115	15
4.16	0.13	-0.80	0.15	0.22	R1IA	2905	645	62	102	16
4.36	-0.14	-0.55	-0.04	-0.16	R5V	3369	729	32	101	18
3.64	-0.20	-0.85	-0.06	-0.28	R2V	3360	727	53	105	17
4.37	0.87	0.46	0.68	0.19	G8III	3546	759	28	103	19
2.22	1.17	1.13	0.79	1.38	K0II	3712	792	55	139	21
4.58	0.96	0.73	0.75	1.27	G8III	3919	823	-46	180	1015
4.36	0.00	-0.02			A0V	4150	866	-58	42	23
2.03	1.02	0.87	0.72	1.24	K1III	4128	865	-18	115	22
5.86	1.20	0.00			K1III	4211	879	-39	181	26
4.54	-0.08	-0.51	0.05	0.00	R2V	4180	862	47	183	25
4.43	1.50	1.86	1.17	2.04	K5III	4656	963	6	107	28
5.07	0.51	0.00			F8V	4676	968	16	76	1020
5.06	1.37	1.68			K5III	4815	983	-75	64	31
4.53	-0.15	-0.58	-0.03	-0.18	R5V	4727	989*	40	171	1021
5.19	0.51	-0.02			F8V	4813	1003	-11	153	30
4.77	1.57	1.92	1.23	2.14	M0III	5112	1055	-1	114	1022
5.44	1.09	1.01			G7III	5457	1102	-70	40	34
3.86	0.14	0.14	0.15	0.23	A5V	5448	1122	37	175	33
4.30	-0.16	-0.53	-0.03	-0.16	B8III	5737	1172	-30	297	35
5.51	0.08	0.13			A2V	6178	1252	-32	410	1026
4.27	0.96	0.70	0.78	1.31	K0III	6186	1258	7	153	36
6.11	0.26	0.06			F0	6288	1281	0	174	37
5.36	0.88	0.00			G5III	6793	1372	-62	89	39
5.16	0.69	0.10			G5VP	6582	1360	54	223	1030
5.20	0.16	0.08			A3V	6767	1378	-42	391	1031
3.44	1.16	1.19	0.84	1.41	K3III	6805	1384	-10	240	40
2.06	1.60	1.96	1.24	2.24	M0III	6860	1400	34	198	42
4.65	1.02	0.82	0.76	1.30	G9III	7087	1437	20	172	1032
4.51	1.04	1.01	0.82	1.40	K0III	7106	1441	29	190	43

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
1033	7ET PSC	1	12	28.479	0.951	+	7	26 55.75	-5.04
1034	89 PSC	1	16	33.511	-0.345	+	3	29 18.49	-1.95
45	HPS PSC	1	18	8.548	0.187	+	27	8 18.25	-0.63
1035	XI AND	1	20	55.136	0.302	+	45	24 12.73	1.25
47	THE CET	1	22	49.335	-0.558	-	8	18 24.88	-21.76
48	DEL CAS	1	24	13.898	4.012	+	60	6 40.17	-4.51
1039	94 PSC	1	25	23.646	0.345	+	19	6 59.47	-5.59
49	GAM PHF	1	27	19.462	-0.148	-	43	26 27.04	-20.32
1043	48 CET	1	28	27.019	0.380	-	21	45 11.07	1.02
1042	38 CAS	1	29	25.064	2.724	+	70	8 30.62	-7.04
1044	DEL PHF	1	30	15.212	1.398	-	49	11 49.40	15.88
1045	HPS AND	1	35	22.865	-1.534	+	41	17 9.57	-37.91
52	51 AND	1	36	30.612	0.661	+	48	30 26.14	-10.84
51	40 CAS	1	36	33.896	-0.243	+	72	55 6.70	-0.89
54	ALP ERI	1	36	49.367	1.290	-	57	21 29.95	-2.83
56	MU PSC	1	40	10.784	-0.162	+	5	22 0.03	0.64
55	43 CAS	1	40	32.495	0.955	+	67	55 20.82	-0.33
58	1296 SCL	1	40	59.486	-0.310	-	36	57 11.20	-2.05
1048	PI SCL	1	41	3.569	-0.586	-	32	26 51.27	-2.21
59	TAU CET	1	42	57.130	-11.925	-	16	3 48.20	86.05
60	OMI PSC	1	44	7.395	0.476	+	9	2 14.88	5.16
1050	4 ARI	1	46	52.582	0.359	+	16	50 11.83	-3.13
62	7ET CET	1	50	16.451	0.238	-	10	27 11.25	-3.62
1052	2 PER	1	50	37.131	0.154	+	50	40 29.77	-2.16
64	ALP TRI	1	51	42.484	0.082	+	29	27 45.36	-22.95
65	XI PSC	1	52	12.633	0.127	+	3	4 10.68	2.80
63	FPS CAS	1	52	39.034	0.490	+	63	33 9.89	-1.51
57	PSI PHF	1	52	41.075	-0.829	-	46	25 11.10	-8.05
66	RET ARI	1	53	18.599	0.686	+	20	41 28.74	-10.77
1053	PHI PHF	1	53	22.266	-0.340	-	42	36 51.70	-2.75
69	ETA2 HYI	1	54	19.524	1.350	-	67	45 54.42	7.77
72	ALP HYI	1	58	0.861	3.780	-	61	41 10.62	3.26
71	HPS CET	1	58	52.398	0.938	-	21	11 37.00	-2.03
1054	4 PER	2	0	41.499	0.400	+	54	22 20.55	0.29
70	50 CAS	2	1	21.160	-0.922	+	72	18 22.60	2.97
1055	MU FOR	2	3	24.872	0.078	-	29	24 41.53	1.01
74	ALP ARI	2	5	48.949	1.383	+	23	20 58.70	-14.40
75	RET TRI	2	8	6.543	1.201	+	34	52 28.24	-3.76
1058	XI1 CET	2	11	43.483	-0.167	+	8	44 5.47	-0.35
1057	19 ARI	2	11	44.526	0.656	+	15	10 5.00	-1.88
78	MU FOR	2	11	51.056	0.147	-	30	50 9.22	0.97
82	PHI ERI	2	15	39.144	1.016	-	51	37 22.44	-2.22
80	67 CET	2	15	47.084	0.592	-	6	31 55.61	-10.47
79	GAM TRI	2	15	52.888	0.372	+	33	44 13.40	-4.56
81	THE ARI	2	16	47.187	-0.063	+	19	47 27.20	0.26

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4	
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER	
5.23	0.27	0.09			F0V	7344	1476	6	174	1033
5.16	0.07	0.08			A3V	7804	1566	2	185	1034
4.76	0.03	0.11	0.08	0.13	A3V	7964	1591	26	220	45
4.87	1.07	0.99	0.81	1.34	K0III	8207	1647	44	287	1035
3.60	1.06	0.94	0.76	1.33	K0III	8512	1695	-8	244	47
2.68	0.13	0.12	0.15	0.24	A5V	853A	1715*	59	248	48
5.50	1.11	1.06			GK1	8763	1740	18	189	1039
3.40	1.56	1.84	1.26	2.24	K5II	9053	1787	-43	449	49
5.11	0.02	0.02			A1V	9132	1808	-22	254	1043
5.82	0.47	0.00			DF6	9021	1817	69	102	1042
3.93	0.98	0.72	0.75	1.26	K0III	9362	1847	-49	425	1044
4.09	0.54	0.06	0.46	0.78	F8V	9826	1948	40	332	1045
3.57	1.28	1.45	0.96	1.61	K3III	9927	1966	47	467	52
5.28	0.96	0.00			G8II	9774	1955	72	86	51
0.49	-0.17	-0.67			R5V	10144	1979	-57	334	54
4.44	1.36	1.56	1.06	1.77	K3III	10380	2055	4	293	56
5.57	-0.07	-0.28			A0P	10221	2045	67	149	55
5.71	-0.01	0.00			A0V	1053A	2082	-37	650	58
5.26	1.04	0.00			GK0	10537	2085	-32	666	1048
3.50	0.72	0.20	0.62	1.09	G8VP	10700	2123*	-16	295	59
4.26	0.96	0.72	0.74	1.23	G8III	10761	2139	8	273	60
5.73	-0.03	-0.12			R9.5V	10982	2188	16	203	1050
3.72	1.14	1.07	0.80	1.35	K2III	11353	2249	-11	359	62
5.64	-0.06	-0.30			R9	11291	2246	50	079	1052
3.41	0.50	0.08	0.42	0.70	F6IV	11443	2272	28	312	64
4.61	0.94	0.72	0.73	1.20	K0III	11559	2293	2	290	65
3.37	-0.16	-0.60	-0.03	-0.15	R3III	11415	2289	62	320	63
4.40	1.59	1.70	1.73	3.24	M4III	11695	2303	-46	552	67
2.65	0.13	0.10	0.12	0.18	A5V	11636	2309*	20	306	66
5.10	-0.06	-0.14	0.02	-0.04	A0	11753	2315	-43	583	1053
4.68	0.94	0.64			G8III	11977	2331	-68	101	69
2.86	0.28	0.10			F0V	12311	2405	-62	162	72
3.99	1.58	1.92	1.26	2.29	M1III	12274	2419	-21	358	71
5.00	-0.08	-0.31	0.03	-0.01	B8V	12303	2442	53	439	1054
3.95	0.00	0.04	0.07	0.06	A1V	12216	2445	71	117	70
4.69	-0.16	-0.49	-0.03	-0.18	A0VP	12767	2506	-29	706	1055
2.00	1.15	1.12	0.84	1.48	K2III	12929	2538*	22	306	74
3.00	0.15	0.10	0.15	0.22	A5III	13161	2572	34	381	75
4.36	0.89	0.60	0.67	1.16	G8II	13611	2656	8	345	1058
5.73	1.56	1.95	1.23	2.20	M0III	13596	2655	14	357	1057
5.27	-0.02	0.00			A2V	13709	2663	-31	882	78
3.55	-0.12	-0.37			R8V	14228	2756	-52	285	82
5.50	0.96	0.76			G8III	14129	2748	-7	393	80
4.00	0.02	0.02	0.04	0.03	A0V	14055	2742	33	397	79
5.60	0.02	0.05			A1V	14191	2767	19	340	81

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
1063	62 AND	2	17	43.331	-0.577	+47	16	12.52	-0.32
1065	DEL HYI	2	21	19.119	-0.780	-68	46	6.19	0.87
83	KAP FOR	2	21	26.619	1.442	-23	55	29.49	-5.66
1067	KAP HYI	2	22	42.987	-1.893	-73	45	16.14	1.30
84	I AM HOR	2	24	13.603	-0.883	-60	25	8.59	-12.84
1066	RHO CET	2	24	47.320	-0.120	-12	23	53.12	-0.66
86	KAP ERI	2	26	6.336	0.214	-47	48	40.10	-0.50
85	XI2 CET	2	26	52.783	0.249	+ 8	21	11.66	-0.42
1069	27 ARI	2	29	34.273	0.212	+17	35	54.51	-8.13
1070	14 TRI	2	30	37.889	0.382	+36	2	30.20	1.64
1071	SIG CET	2	30	56.882	-0.533	-15	20	57.57	-11.72
88	I AM1 FOR	2	32	6.934	-0.164	-34	45	18.02	-1.59
90	MU HYI	2	32	8.866	4.538	-79	12	51.44	-4.44
1074	80 CET	2	34	49.037	-0.258	- 7	56	7.16	-5.71
89	MU ARI	2	37	26.943	-0.065	+21	51	30.44	-1.43
95	FPS HYI	2	39	12.970	1.700	-68	22	10.12	0.86
1075	TOT ERI	2	39	43.172	1.165	-39	57	27.12	-2.52
1076	ZET HOR	2	39	54.794	0.459	-54	39	8.11	0.59
94	35 ARI	2	42	2.304	0.060	+27	36	21.42	-0.66
1077	14 PER	2	42	30.885	0.024	+44	11	45.65	-0.43
93	THE PER	2	42	33.052	3.425	+49	7	41.01	-8.39
97	PI CET	2	42	58.719	-0.080	-13	57	34.81	-1.30
98	MU CET	2	43	38.487	1.899	+10	0	49.07	-3.07
101	BET FOR	2	48	5.130	0.713	-32	30	22.05	15.84
100	41 ARI	2	48	33.965	0.496	+27	9	45.17	-11.23
99	ETA PER	2	48	56.033	0.226	+55	47	49.41	-1.10
102	TAU2 ERI	2	49	56.909	-0.379	-21	6	8.21	-1.76
1079	SIG ARI	2	50	9.864	0.215	+14	59	2.47	-2.36
104	ETA ERI	2	55	15.176	0.501	- 8	59	34.52	-21.72
1081	47 ARI	2	56	42.541	1.657	+20	34	24.30	-2.71
1082	24 PER	2	57	34.079	-0.389	+35	5	16.64	0.97
1083	I AM CET	2	58	25.535	0.021	+ 8	48	45.37	-1.00
107	ALP CET	3	1	1.330	-0.083	+ 3	59	47.12	-7.43
1085	TAU3 FRI	3	1	19.949	-1.074	-23	43	4.18	-5.03
1086	58G ERI	3	2	6.561	0.203	-47	4	6.73	0.82
110	MU HOR	3	3	2.770	-0.927	-59	49	49.73	-6.11
108	GAM PER	3	3	2.840	0.004	+53	24	49.30	-0.20
112	TOT PER	3	7	19.513	12.972	+49	31	22.59	-8.20
1088	55 ARI	3	8	9.801	0.153	+28	59	11.25	-0.97
114	DEL ARI	3	10	15.171	1.073	+19	38	12.90	-0.70
1089	ZET ARI	3	13	31.080	-0.189	+20	57	23.44	-7.11
1091	ZET ERI	3	14	39.939	-0.054	- 8	54	29.01	4.87
1095	TOT HYI	3	16	31.816	3.507	-77	28	35.40	6.50
1093	KAP CET	3	18	5.994	1.781	+ 3	16	59.22	9.71
119	82G ERI	3	18	58.130	27.777	-43	9	38.77	74.01

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM NUMBER	FK4 NUMBER	
V	B-V	U-B	V-R	V-I						
5.32	0.00	0.00			A0V	14212	2779	46	552	1063
4.08	0.03	0.05			A2V	15008	2872	-69	113	1065
5.19	0.60	0.00			G1V	14802	2862	-24	1038	83
5.00	1.09	1.05			K0III	15248	2913	-74	194	1067
5.34	0.40	0.00			F2III	15233	2931	-60	199	84
4.88	-0.03	-0.06	-0.02	-0.01	R9V	15130	2932	-12	451	1066
4.24	-0.14	-0.46	-0.03	-0.16	R5III	15371	2954	-48	637	86
4.28	-0.06	-0.13	0.04	0.00	R9III	15318	2960*	7	388	85
6.23	0.90	0.54			K0III	15596		17	380	1069
5.15	1.47	1.78			K5III	15656	3032	35	497	1070
4.75	0.45	-0.03	0.41	0.68	F5IV	15798	3045	-15	449	1071
5.90	1.06	0.00			GK0	15975	3067	-35	877	88
5.27	0.98	0.74			G4III	16522	3102	-79	66	90
5.52	1.60	1.93			M0III	16212	3126	-8	489	1074
5.30	0.16	0.18			A7V	16432	3167	21	362	89
4.10	-0.06	-0.12			R9III	16978	3240	-68	161	95
4.10	1.02	0.75	0.79	1.35	K0III	16815	3237	-40	689	1075
5.20	0.42	0.00			DF5	16920	3246	-55	446	1076
4.65	-0.14	-0.63	-0.01	-0.14	R3V	16908	3273	27	424	94
5.43	0.90	0.65			G0IB	16901	3278	43	566	1077
4.11	0.49	-0.01	0.46	0.76	F7V	16895	3277	48	746	93
4.23	-0.14	-0.44	-0.01	-0.15	R7V	17081	3300	-14	519	97
4.26	0.31	0.06	0.31	0.50	F0IV	17094	3309	9	359	98
4.45	0.98	0.70	0.76	1.30	G6III	17652	3387	-32	1025	101
3.61	-0.11	-0.35	0.00	-0.11	R8V	17573	3391	26	471	100
3.77	1.69	1.90	1.23	2.12	K3IB	17506	3390	55	714	99
4.76	0.91	0.63	0.70	1.17	K0III	17824	3429	-21	509	102
5.46	-0.08	-0.46			R7V	17769	3427	14	480	1079
3.89	1.11	1.00	0.79	1.37	K1III	18322	3539	-9	553	104
5.80	0.41	0.01			DF5	18404	3562	20	480	1081
4.94	1.24	1.29	0.89	1.53	K2III	18449	3575	34	550	1082
4.70	-0.11	-0.45	-0.02	-0.14	R5III	18604	3595	8	455	1083
2.52	1.64	1.95	1.35	2.51	M2III	18884	3643	3	419	107
4.07	0.16	0.09	0.13	0.22	A5V	18978	3649	-24	1387	1085
5.82	1.30	0.00			GK2	19141	3667	-47	932	1086
5.10	0.35	0.00			DF2	19319	3694	-60	236	110
2.94	0.69	0.45	0.61	1.06	G8III	18925	3664	52	654	108
4.05	0.59	0.12	0.54	0.83	G0V	19373	3740	49	857	112
5.72	-0.09	-0.15			R7V	19548	3762	28	499	1088
4.35	1.03	0.88	0.77	1.28	K2III	19787	3805	19	477	114
4.90	0.00	0.00	0.08	0.05	A0IV	20150	3872	20	527	1089
4.80	0.23	0.09	0.23	0.34	A7M	20320	3899	-9	624	1091
5.51	0.44	-0.02			F2	21024	3977	-77	134	1095
4.82	0.68	0.18	0.50	0.93	G5V	20630	3969*	2	518	1093
4.26	0.71	0.21	0.62	1.02	G5V	20794	4000	-43	1028	119

TABLE 1 CONTINUED

FK4 NUMBR	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
1094	TAU ARI	3	19	50.248	0.186	+21	3	41.51	-2.33
120	ALP PER	3	22	36.025	0.259	+49	46	37.51	-2.16
121	OMI TAU	3	23	31.122	-0.461	+ 8	56	43.31	-7.48
123	XI TAU	3	25	51.929	0.391	+ 9	39	0.14	-3.47
124	SIG PER	3	28	52.458	0.046	+47	54	49.32	2.31
126	KAP RET	3	28	57.297	5.608	-63	1	18.68	37.46
1097	17 FRI	3	29	25.459	0.056	- 5	9	23.51	0.97
125	5 TAU	3	29	32.691	0.134	+12	51	19.69	0.22
127	EPS ERI	3	31	47.874	-6.616	- 9	32	19.16	2.14
128	45G HOR	3	31	51.675	0.851	-50	27	34.74	8.16
1099	TAU5 ERI	3	32	43.566	0.288	-21	42	45.26	-2.43
1100	20 ERI	3	35	11.671	0.141	-17	32	44.49	-0.73
1101	10 TAU	3	35	38.736	-1.580	+ 0	19	35.19	-48.04
1102	TAU FOR	3	37	47.677	0.139	-28	1	14.39	2.98
1103	11 TAU	3	39	20.045	0.069	+25	15	11.05	-1.00
131	DEL PER	3	41	12.492	0.275	+47	42	43.86	-3.22
133	DEL FOR	3	41	17.559	0.042	-32	0	51.48	1.74
135	DEL ERI	3	42	5.790	-0.663	- 9	50	37.53	74.62
137	24 FRI	3	43	17.210	-0.019	- 1	14	16.18	-0.31
136	17 TAU	3	43	26.773	0.137	+24	2	20.61	-4.18
134	MU PER	3	43	33.414	-0.119	+42	30	14.51	0.03
141	RET RET	3	43	53.663	4.937	-64	52	56.31	7.66
1104	29 TAU	3	44	23.750	0.099	+ 5	58	33.27	-0.70
140	TAU6 ERI	3	45	48.835	-1.192	-23	19	11.27	-52.66
146	GAM HYI	3	47	35.759	1.313	-74	18	46.30	11.65
142	27 TAU	3	47	43.873	0.130	+23	58	52.33	-4.27
138	GAM CAM	3	47	47.942	0.438	+71	15	37.42	-3.75
144	ZET PER	3	52	37.121	0.050	+31	48	48.84	-0.87
149	GAM ERI	3	56	54.467	0.384	-13	34	33.23	-10.98
148	YT PER	3	57	24.161	0.026	+35	43	23.82	0.12
1110	DEL RET	3	58	21.745	0.141	-61	28	3.92	-1.65
1111	35 ERI	4	0	18.920	0.128	- 1	36	57.29	-1.38
151	MU TAU	4	1	52.608	0.007	+ 5	55	25.67	-0.02
1112	37 TAU	4	3	16.367	0.656	+22	1	3.15	-5.60
1113	LAM PER	4	4	47.296	-0.148	+50	17	15.42	-3.45
152	48 PER	4	6	54.727	0.211	+47	38	59.77	-2.77
154	OMI1 FRI	4	10	41.510	0.028	- 6	53	57.10	8.28
1117	MU PER	4	13	7.708	0.055	+48	20	59.54	-1.56
155	ALP HOR	4	13	12.299	0.358	-42	21	10.72	-20.77
156	ALP RET	4	14	6.748	0.676	-62	32	1.14	4.95
1118	MU TAU	4	14	13.709	0.135	+ 8	49	59.99	-2.19
157	GAM DOR	4	15	23.788	1.134	-51	32	47.72	18.89
159	GAM TAU	4	18	25.484	0.804	+15	34	14.97	-2.40
158	54 PER	4	18	50.870	-0.191	+34	30	36.54	-0.31
166	DEL MEN	4	19	33.893	0.661	-80	16	17.75	6.41

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4	
V	B-V	U-R	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER	
5.27	-0.08	-0.53			B5VP	20756	4007	20	543	1094
1.80	0.48	0.38	0.45	0.78	F5IB	20902	4041	49	917	120
3.59	0.89	0.62	0.67	1.12	G8III	21120	4070*	8	511	121
3.72	-0.08	-0.34	0.00	-0.10	R8P	21364	4107	-9	439	123
4.35	1.37	1.54	1.07	1.81	K3III	21552	4158	47	843	124
4.70	0.40	-0.06			F5V	22001	4200	-63	234	126
4.73	-0.09	-0.28	0.01	-0.07	R8V	21790	4185	-5	674	1097
4.11	1.12	1.03	0.76	1.31	K0II	21754	4184	12	486	125
3.73	0.89	0.57	0.73	1.20	K2V	22049	4244*	-9	697	127
5.68	1.10	0.00			K3III	22231	4251	-50	1071	128
4.26	-0.10	-0.35	0.01	-0.11	R8V	22203	4258	-22	628	1099
5.22	-0.14	-0.49			A1P	22470	4305	-17	699	1100
4.28	0.57	0.06	0.50	0.82	F8V	22484	4313	0	572	1101
6.00	-0.02	0.00			A0V	22789	4351	-28	1225	1102
6.15	0.06	0.16			A2V	22805	4382	24	529	1103
3.02	-0.13	-0.50	0.04	-0.07	R5III	22928	4427	47	876	131
4.99	-0.17	-0.59	-0.05	-0.20	R5	23227	4439	-32	1430	133
3.53	0.92	0.68	0.73	1.22	K0IV	23249	4450	-10	728	135
5.24	-0.10	-0.38			R7V	23363	4481	-1	526	137
3.70	-0.11	-0.41	-0.01	-0.11	R6III	23302	4477	23	507	136
3.77	0.43	0.28	0.41	0.67	F5II	23230	4474	42	815	134
3.84	1.13	1.11			K0IV	23817	4517	-65	263	141
5.34	-0.12	-0.61			R3V	23466	4505	5	539	1104
4.22	0.43	-0.02	0.39	0.61	F3V	23754	4547	-23	1565	140
3.24	1.63	1.91			M1III	24512	4633	-74	276	146
3.63	-0.08	-0.37	0.02	0.03	R8III	23850	4586	23	557	142
4.65	0.02	0.07	0.14	0.18	A3IV	23401	4557	70	259	138
2.85	0.12	-0.77	0.16	0.25	B1IB	24398	4688	31	666	144
2.95	1.59	1.96	1.26	2.26	M0III	25025	4778	-13	781	149
4.04	0.01	-0.92	0.15	0.15	O8III	24912	4779	35	775	148
4.55	1.62	1.95			M2III	25422	4808	-61	290	1110
5.27	-0.15	-0.55			R5V	25340	4828	-1	572	1111
3.90	0.03	0.06	0.09	0.09	A1V	25490	4862	5	581	151
4.36	1.07	0.95	0.80	1.33	K0III	25604	4897	21	585	1112
4.28	0.00	-0.04	0.09	0.11	R9V	25642	4924	49	1101	1113
4.03	-0.03	-0.54	0.13	0.11	R3VPE	25940	4967	47	939	152
4.04	0.33	0.12	0.32	0.48	F2II	26574	5056	-7	764	154
4.13	0.96	0.64	0.77	1.31	G0IB	26630	5099	48	1063	1117
3.85	1.10	1.01	0.86	1.45	K2III	26967	5121	-42	1425	155
3.34	0.91	0.62			G6III	27256	5164	-62	332	156
4.29	-0.05	-0.54	0.06	0.00	R3V	26912	5134	8	657	1118
4.24	0.31	0.00			F2IV	27290	5179	-51	1066	157
3.64	0.99	0.81	0.73	1.20	K0III	27371	5226	15	612	159
4.92	0.94	0.69			G8III	27348	5235	34	860	158
5.68	0.84	0.53			K0P	28525	5332	-80	116	166

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
162	DEL TAU	4	21	32.868	0.752	+17	29	14.64	-2.85
163	ETA RET	4	21	37.556	1.336	-63	26	35.41	17.39
1120	XI FRI	4	22	29.011	-0.366	-	3	47 59.75	-5.40
1121	43 FRI	4	23	8.019	0.497	-34	4	18.74	5.08
164	FPS TAU	4	27	12.735	0.763	+19	7	42.25	-3.65
167	DEL CAE	4	30	5.922	0.027	-45	0	16.57	-0.07
1125	RHO TAU	4	32	29.017	0.688	+14	47	42.54	-2.50
168	ALP TAU	4	34	32.456	0.449	+16	27	44.02	-18.90
170	UPS2 ERI	4	34	36.984	-0.370	-30	36	38.56	-1.22
174	TAU TAU	4	40	48.093	-0.010	+22	54	43.77	-1.58
1130	RET CAE	4	41	12.444	0.328	-37	11	25.87	19.39
1131	56 FRI	4	42	55.998	-0.034	-	8	32 50.71	-0.15
177	MU MEN	4	43	17.980	0.302	-70	58	31.06	3.38
176	MU ERI	4	44	18.018	0.071	-	3	17 51.22	-1.09
175	4 CAM	4	45	59.884	0.651	+56	42	59.02	-14.53
1134	PI3 ORI	4	48	32.106	3.110	+	6	55 14.07	1.54
179	PI4 ORI	4	49	55.538	-0.026	+	5	33 54.73	0.14
1135	97 TAU	4	49	58.067	0.575	+18	48	0.91	-3.48
178	ALP CAM	4	51	39.199	0.057	+66	18	14.76	0.81
181	TOT AUR	4	55	25.637	0.026	+33	7	46.21	-1.77
1138	ETA MEN	4	55	51.991	0.732	-74	58	28.13	5.72
182	RET CAM	5	1	16.568	-0.049	+60	24	32.87	-1.37
184	TOT TAU	5	1	39.515	0.473	+21	33	25.09	-4.16
1140	11 ORI	5	3	11.724	0.109	+15	22	18.75	-3.46
187	ETA2 PIC	5	4	20.590	0.645	-49	36	35.38	-0.12
186	FPS LEP	5	4	26.602	0.126	-22	24	8.42	-7.15
185	ETA AUR	5	4	49.684	0.260	+41	12	12.88	-6.69
189	ZET DOR	5	5	5.826	-0.424	-57	30	18.62	11.60
188	RET ERI	5	6	40.067	-0.673	-	5	6 59.05	-8.02
190	LAM ERI	5	7	59.759	-0.027	-	8	47 1.81	-0.38
1142	16 ORI	5	8	0.296	0.417	+	9	47 59.85	-0.50
192	MU AUR	5	11	46.971	-0.165	+38	27	27.08	-7.63
1144	MU LEP	5	11	51.088	0.230	-16	13	58.70	-2.67
196	THE DOR	5	13	46.300	0.253	-67	12	44.70	3.40
195	TAU ORI	5	16	26.360	-0.139	-	6	52 9.40	-0.80
197	OMI COL	5	16	37.047	0.668	-34	55	4.80	-33.90
1146	LAM LEP	5	18	28.065	-0.068	-13	12	2.02	-0.31
199	ZET PIC	5	18	46.679	0.180	-50	37	52.52	22.78
1147	22 ORI	5	20	32.126	-0.027	-	0	24 18.30	-0.13
201	GAM ORI	5	23	50.515	-0.079	+	6	19 44.79	-1.36
202	RET TAU	5	24	46.358	0.193	+28	35	18.82	-17.49
1151	CHI AUR	5	31	9.821	0.001	+32	10	32.72	-0.24
207	ALP LEP	5	31	40.200	-0.037	-17	50	18.61	0.14
214	GAM MEN	5	32	49.689	3.262	-76	21	32.43	28.42
208	PHI1 ORI	5	33	30.082	0.004	+	9	28 28.31	-0.34

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBR	GC NUMBER	DM NUMBER	FK4 NUMBER	
V	B-V	U-B	V-R	V-I						
3.76	0.98	0.83	0.73	1.20	K0III	27697	5304	17	712	162
5.23	0.95	0.64			G7III	28093	5333	-63	324	163
5.18	0.07	0.08			A1V	27861	5327	-4	818	1120
3.95	1.49	1.80	1.17	2.00	M1III	28028	5349	-34	1664	1121
3.54	1.02	0.88	0.73	1.23	K0III	28305	5430*	18	640	164
5.06	-0.20	-0.78			R3V	28873	5527	-45	1567	167
4.65	0.25	0.09	0.24	0.36	F0V	28910	5558	14	720	1125
0.86	1.53	1.89	1.22	2.15	K5III	29139	5605	16	629	168
3.81	0.97	0.73	0.75	1.24	K0III	29291	5614	-30	1901	170
4.28	-0.12	-0.56	-0.03	-0.16	R3V	29763	5716	22	739	174
5.04	0.38	0.00			F2V	29992	5740	-37	1867	1130
5.92	-0.11	-0.83			R2VE	30076	5768	-8	929	1131
5.53	-0.13	-0.45			R9IV	30612	5809	-71	282	177
4.02	-0.15	-0.60	-0.05	-0.19	R5IV	30211	5796	-3	876	176
5.26	0.25	0.12			AM	30121	5811	56	973	175
3.19	0.45	-0.01	0.42	0.68	F6V	30652	5875*	6	762	1134
3.69	-0.17	-0.80	-0.02	-0.17	R2III	30836	5911*	5	745	179
5.10	0.22	0.12	0.22	0.34	A5	30780	5907	18	743	1135
4.30	0.01	-0.88	0.12	0.12	O9.5IA	30614	5924	66	358	178
2.69	1.53	1.76	1.06	1.88	K3II	31398	6029	32	855	181
5.46	1.52	1.82			K6III	32440	6078	-75	290	1138
4.04	0.90	0.63	0.69	1.15	G0IB	31910	6136	60	856	182
4.64	0.15	0.14	0.17	0.26	A7V	32301	6158	21	751	184
4.67	-0.07	-0.09	0.05	0.03	A0P	32549	6191	15	732	1140
5.02	1.48	1.88	1.19	2.11	M2III	33042	6234	-49	1562	187
3.19	1.47	1.79	1.11	1.92	K5III	32887	6231	-22	1000	186
3.17	-0.18	-0.67	-0.03	-0.20	R3V	32630	6226*	41	1052	185
4.71	0.53	-0.06			F8V	33262	6258	-57	735	189
2.80	0.13	0.10	0.15	0.23	A3III	33111	6274*	-5	1162	188
4.27	-0.20	-0.90	-0.07	-0.27	R2IV	33328	6304	-8	1040	190
5.43	0.24	0.15			AM	33254	6300	9	743	1142
4.86	0.18	0.09	0.19	0.29	AM	33641	6375	38	1063	192
3.32	-0.11	-0.38	-0.01	-0.13	R9IIIP	33904	6382	-16	1072	1144
4.82	1.28	1.38			K2III	34649	6444	-67	401	196
3.58	-0.11	-0.48	-0.02	-0.13	R5III	34503	6480	-7	1028	195
4.81	1.00	0.81			K0IV	34642	6495	-65	2214	197
4.29	-0.28	-1.01	-0.12	-0.40	R0.5IV	34816	6531	-13	1127	1146
5.43	0.51	0.01			F8III	35072	6553	-50	1723	199
4.72	-0.17	-0.80	-0.06	-0.23	R2IV	35039	6579	-0	930	1147
1.64	-0.23	-0.87	-0.09	-0.31	R2III	35468	6668*	6	919	201
1.65	-0.13	-0.49	-0.01	-0.09	R7III	35497	6681*	28	795	202
4.76	0.32	-0.44	0.37	0.64	B5IAB	36371	6849	32	1024	1151
2.58	0.21	0.21	0.22	0.43	F0IB	36673	6875	-17	1166	207
5.18	1.13	1.19			K4III	37763	6966	-73	333	214
4.41	-0.18	-0.95	0.01	-0.16	R0IV	36822	6907	9	877	208

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT			PROPER MO-		PROPER MO-		
		ASCENSION			TION IN RA	DECLINATION	TION IN DEC		
		HRS	MIN	SEC	SEC/CENT	DEG	MIN	SEC	SEC/CENT
210	FPS ORI	5	34	59.644	-0.021	-	1	2 58.13	-0.23
211	7ET TAU	5	36	12.519	0.011	+21	7	45.19	-2.17
215	ALP COL	5	38	46.718	0.014	-34	5	10.19	-2.74
217	GAM LEP	5	43	27.692	-2.127	-22	27	19.20	-37.19
216	OMI AUR	5	44	2.340	-0.099	+49	49	3.16	0.04
1154	DEL DOR	5	44	43.785	-0.427	-65	44	40.32	0.70
219	7ET LEP	5	45	51.983	-0.164	-14	49	47.83	-0.33
220	KAP ORI	5	46	37.002	-0.025	-	9	40 37.76	-0.49
1156	GAM PTC	5	49	23.388	0.917	-56	10	20.16	-7.39
223	BET COL	5	50	6.734	0.416	-35	46	35.76	40.22
222	DEL LEP	5	50	17.280	1.589	-20	52	48.80	-65.06
1158	136 TAU	5	51	49.056	0.040	+27	36	28.58	-1.37
1157	XI AUR	5	52	49.983	-0.138	+55	42	11.88	2.19
226	ETA LEP	5	55	18.606	-0.341	-14	10	16.12	13.61
1160	GAM COL	5	56	41.091	-0.032	-35	17	6.38	0.81
225	DEL AUR	5	57	32.984	0.942	+54	17	4.87	-12.60
1161	60 ORI	5	57	35.454	-0.099	+	0 33	6.75	0.11
225	ETA COL	5	58	24.648	0.144	-42	48	57.29	-1.59
1163	1 GEM	6	2	39.611	-0.044	+23	15	57.61	-10.18
230	66 ORI	6	3	42.187	-0.030	+	4 9	40.16	-0.62
232	NU ORI	6	6	12.028	0.036	+14	46	21.33	-2.24
1166	NU DOR	6	8	53.554	-0.933	-68	50	18.30	1.88
235	DEL PIC	6	9	49.795	-0.095	-54	57	46.16	0.77
233	36 CAM	6	10	26.233	0.148	+65	43	31.61	-3.25
239	ALP MEN	6	10	57.501	3.055	-74	44	43.75	-21.23
1168	KAP AUR	6	13	50.883	-0.550	+29	30	29.77	-26.46
1169	74 ORI	6	15	5.697	0.555	+12	16	48.31	18.53
238	KAP COL	6	15	41.776	-0.109	-35	7	54.47	8.38
237	2 LYN	6	17	30.370	-0.071	+59	1	17.72	2.48
1170	7 MON	6	18	33.351	-0.067	-	7 48	42.57	-0.22
240	7ET CMA	6	19	23.443	0.041	-30	3	6.67	0.35
243	BET CMA	6	21	38.480	-0.088	-17	56	35.16	-0.37
244	FPS MON	6	22	29.717	-0.134	+	4 36	22.44	1.03
245	ALP CAR	6	23	25.152	0.291	-52	40	55.37	2.21
246	10 MON	6	26	46.385	-0.066	-	4 44	46.32	-0.05
1173	NU GEM	6	27	32.247	-0.042	+20	13	42.90	-1.71
1174	13 MON	6	31	36.312	-0.017	+	7 21	6.11	-0.77
249	XI2 CMA	6	34	2.939	0.026	-22	56	41.63	1.32
247	8 LYN	6	35	29.981	-2.861	+61	30	15.43	-27.67
251	GAM GEM	6	36	19.508	0.299	+16	25	15.71	-4.38
252	NU PUP	6	37	1.527	-0.064	-43	10	27.15	-0.52
264	7ET MEN	6	42	4.109	-0.707	-80	47	24.21	5.69
254	FPS GEM	6	42	27.321	-0.032	+25	9	22.35	-1.47
256	XI GEM	6	43	56.510	-0.795	+12	55	21.60	-19.37
255	PSI5 AUR	6	45	0.603	-0.012	+43	36	10.41	16.36

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4	
V	B-V	U-B	V-R	V-I	TYPE	NUMBR	NUMBER	NUMBER	NUMBER	
1.70	-0.19	-1.04	-0.01	-0.19	R0IA	37128	6960*	- 1	969	210
2.98	-0.17	-0.73	0.00	-0.09	R2IIIP	37202	6985	21	908	211
2.63	-0.13	-0.45	-0.01	-0.11	R8VE	37795	7078	-34	2375	215
3.60	0.48	-0.01	0.45	0.72	F6V	38393	7197	-22	1211	217
5.43	0.03	0.08			AP	38104	7182	49	1398	216
4.34	0.22	0.11			A6IV	39014	7246	-65	496	1154
3.55	0.10	0.06	0.13	0.16	A3V	38678	7247*	-14	1232	219
2.06	-0.18	-1.03	-0.03	-0.21	R0.5IA	38771	7264	- 9	1235	220
4.50	1.10	0.99			K1III	39523	7353	-56	946	1156
3.11	1.16	1.21	0.85	1.43	K2III	39425	7364	-35	2546	223
3.78	0.99	0.69	0.79	1.36	G8III	39364	7362	-20	1211	222
4.55	-0.02	0.04	0.04	0.05	A0III	39357	7389	27	899	1158
4.95	0.05	0.10	0.09	0.12	A2P	39283	7404	55	1027	1157
3.71	0.33	-0.01	0.31	0.48	F0IV	40136	7492	-14	1286	226
4.36	-0.18	-0.65	0.07	-0.23	R3IV	40494	7536	-35	2612	1160
3.71	1.00	0.86	0.75	1.26	K0III	40035	7521	54	970	225
5.21	0.01	0.01			A1	40446	7556	0	1239	1161
3.95	1.14	1.08	0.82	1.40	K0III	40808	7591	-42	2266	229
4.16	0.83	0.52	0.68	1.13	K0III	41116	7676	23	1170	1163
5.62	1.05	0.76			GG4	41380	7704	4	1116	230
4.41	-0.16	-0.67	0.05	-0.22	R3V	41753	7772	14	1152	232
5.05	-0.08	-0.20			R8V	43107	7886	-68	474	1166
4.80	-0.25	-1.00			B1	42933	7898	-54	980	235
5.32	1.34	1.44			K2II	41927	7856	65	517	233
5.08	0.72	0.31			G5V	43834	7962	-74	374	239
4.33	1.02	0.80	0.78	1.33	G8III	43039	7981	29	1154	1168
5.04	0.42	-0.02			F5IV	43386	8033	12	1084	1169
4.36	0.99	0.84	0.73	1.24	G8III	43785	8062	-35	2800	238
4.45	0.01	0.03	0.08	0.06	A2V	43378	8068	59	959	237
5.25	-0.20	-0.74			R2V	44112	8132	- 7	1373	1170
3.02	-0.19	-0.71	0.01	-0.19	R3V	44402	8170	-30	3038	240
1.98	-0.23	-0.99	0.11	-0.35	R1II	44743	8223	-17	1467	243
4.29	0.20	0.10	0.20	0.31	A5IV	44769	8240	4	1236	244
0.72	0.16	0.04			F0IB	45348	8302	-52	914	245
5.05	-0.19	-0.76	-0.18	0.11	R2V	45546	8378	- 4	1526	246
4.15	-0.13	-0.48	-0.02	-0.13	R7IV	45542	8394	20	1441	1173
4.48	0.01	-0.24	0.09	0.13	A0IB	46300	8506	7	1337	1174
4.54	-0.03	-0.04	0.05	0.04	A0V	46933	8577	-22	1458	249
5.94	0.90	0.52			GG7	46480	8582	61	893	247
1.93	0.00	0.03	0.07	0.06	A0IV	47105	8633*	16	1223	251
3.17	-0.11	-0.38	0.00	-0.07	B8III	47670	8675	-43	2576	252
5.63	0.20	0.13			A4IV	50506	8869	-80	196	264
2.99	1.41	1.47	0.95	1.57	G8IB	48329	8786	25	1406	254
3.35	0.43	0.05	0.40	0.63	F5IV	48737	8823	13	1396	256
5.24	0.55	0.06			G0V	48682	8836	43	1595	255

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
1177	16 MON	6	45	13.845	-0.043	+ 8	36	49.40	-0.82
1176	PSI6 AUR	6	45	49.868	-0.021	+48	48	59.63	0.70
258	18 MON	6	46	36.504	-0.142	+ 2	26	22.37	-1.31
262	ALP PIC	6	47	56.725	-0.987	-61	54	55.37	26.62
1180	KAP CMA	6	48	56.602	-0.088	-32	28	47.97	0.17
263	TAU PUP	6	49	20.398	0.332	-50	35	8.01	-7.42
259	43 CAM	6	51	7.467	0.112	+68	55	6.70	0.56
261	THE GEM	6	51	12.455	-0.010	+33	59	29.69	-5.08
267	IOT VOL	6	51	43.751	0.034	-70	56	1.88	1.83
266	THE CMA	6	53	4.422	-0.979	-12	0	27.32	-1.62
1183	SIG CMA	7	0	45.730	-0.059	-27	53	58.66	0.23
1182	OME GEM	7	0	57.052	-0.050	+24	15	3.45	-0.17
270	OMI2 CMA	7	2	1.281	-0.051	-23	47	50.60	-0.10
271	GAM CMA	7	2	40.282	-0.041	-15	35	48.45	-0.88
273	DEL CMA	7	7	24.866	-0.058	-26	21	15.21	0.29
1186	20 MON	7	9	2.101	-0.032	- 4	11	55.01	21.37
274	63 AUR	7	10	0.358	0.379	+39	21	40.07	0.09
1187	DEL MON	7	10	38.274	-0.030	- 0	27	6.93	0.47
278	PI PUP	7	16	17.650	-0.103	-37	3	13.10	0.35
281	DEL VOL	7	16	50.800	-0.106	-67	54	48.35	-0.38
1191	66 AUR	7	22	28.867	-0.055	+40	43	11.88	-2.68
283	ETA CMA	7	23	8.677	-0.065	-29	15	19.80	0.25
282	IOT GEM	7	24	14.216	-0.915	+27	50	49.34	-8.82
285	BET CMI	7	25	50.933	-0.366	+ 8	20	19.68	-4.03
1193	6 CMI	7	28	27.632	0.004	+12	3	26.48	-2.07
1196	HPS GEM	7	34	26.679	-0.249	+26	57	1.13	-10.85
289	25 MON	7	36	5.042	-0.493	- 4	3	23.16	1.37
293	ALP MON	7	40	5.988	-0.523	- 9	29	39.30	-2.41
292	24 LYN	7	40	59.019	-0.475	+58	46	5.69	-5.15
295	BET GEM	7	43	50.914	-4.733	+28	5	7.31	-4.97
1200	81 GEM	7	44	44.121	-0.511	+18	34	10.94	-6.18
1202	4 PUP	7	44	50.485	-0.137	-14	30	16.43	0.31
1201	11 CMI	7	44	56.951	-0.192	+10	49	40.35	-2.37
1205	7ET CMI	7	50	27.274	-0.132	+ 1	49	44.90	-0.49
1207	PHI GEM	7	52	1.761	-0.262	+26	49	44.72	-3.34
303	CHI CAR	7	56	10.078	-0.368	-52	55	2.40	2.51
304	27 MON	7	58	32.168	-0.394	- 3	36	47.74	-0.76
302	53 CAM	7	59	39.940	-0.584	+60	23	29.83	-2.23
305	CHI GEM	8	2	2.741	-0.186	+27	51	46.01	-4.37
306	7ET PUP	8	2	44.387	-0.265	-39	56	5.56	1.10
307	27 LYN	8	6	39.474	-0.639	+51	34	38.09	-0.70
311	20 PUP	8	12	13.710	-0.138	-15	42	54.23	-0.70
312	BET CNC	8	15	12.852	-0.305	+ 9	15	37.82	-5.16
1217	CHI CNC	8	18	36.494	-0.131	+27	17	47.35	-38.18
314	31 LYN	8	21	11.822	-0.164	+43	15	58.77	-10.04

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM		FK4 NUMBER
V	B-V	U-B	V-R	V-I				NUMBER	NUMBER	
5.92	-0.18	-0.68			R3V	48977	8856	8	1486	1177
5.21	1.13	1.04			K1III	48781	8858	48	1436	1176
4.46	1.11	1.04	0.78	1.33	K0III	49293	8892	2	1397	258
3.26	0.22	0.07			A5V	50241	8941	-61	720	262
3.94	-0.24	-0.89	0.07	-0.27	B2VE	50013	8946	-32	3404	1180
2.92	1.20	1.20			K0III	50310	8969	-50	2415	263
5.12	-0.13	0.00			R7IV	49340	8957	69	394	259
3.60	0.11	0.13	0.11	0.18	A3III	50019	8989	34	1481	261
5.39	-0.12	-0.37			B6IV	51557	9057	-70	572	267
4.06	1.43	1.69	1.10	1.89	K3III	50778	9051	-11	1681	266
3.46	1.74	1.86	1.32	2.32	M0IAB	52877	9276	-27	3544	1183
5.17	0.94	0.68			G5II	52497	9263	24	1502	1182
3.03	-0.09	-0.82	0.01	-0.08	R3IA	53138	9307	-23	4797	270
4.10	-0.12	-0.47	-0.01	-0.11	R8II	53244	9320	-15	1625	271
1.84	0.67	0.49	0.52	0.85	F8IA	54605	9443	-26	3916	273
4.91	1.02	0.79	0.78	1.31	K0III	54810	9477	-4	1840	1186
4.91	1.44	1.74			K4II	54716	9490	39	1882	274
4.14	-0.01	0.01	0.08	0.09	A0IV	55185	9518	-0	1636	1187
2.70	1.63	1.24	1.24	2.15	K5III	56855	9706	-36	3489	278
3.97	0.78	0.45			F8II	57623	9747	-67	730	281
5.17	1.24	1.24			K0III	57669	9850	40	1852	1191
2.44	-0.07	-0.73	0.07	0.02	R5IA	58350	9886	-29	4328	283
3.78	1.03	0.85	0.76	1.27	K0III	58207	9897	28	1385	282
2.89	-0.10	-0.30	0.03	-0.04	B8V	58715	9947	8	1774	285
4.53	1.28	1.38	0.88	1.52	K2III	59294	10024	12	1567	1193
4.06	1.54	1.94	1.22	2.14	M0III	60522	10167	27	1424	1196
5.13	0.44	0.09			F5III	61064	10217	-3	1979	289
3.93	1.02	0.88	0.76	1.28	K0III	61935	10345	-9	2172	293
4.98	0.09	0.08	0.19	0.24	A3III	61497	10343	59	1103	292
1.15	1.00	0.85	0.75	1.25	K0III	62509	10438	28	1463	295
4.88	1.45	1.76	1.14	1.98	K5III	62721	10456	18	1733	1200
5.04	0.33	0.09			A3	62952	10469	-14	2199	1202
5.30	0.01	-0.02			A1V	62832	10463	11	1670	1201
5.14	-0.13	-0.47			B8II	63975	10622	2	1808	1205
4.96	0.10	0.09	0.13	0.18	A3V	64145	10653	27	1499	1207
3.46	-0.20	-0.64			R2IV	65575	10770	-52	1343	303
4.93	1.20	1.21			K2III	65695	10811	-3	2157	304
6.00	0.14	0.03			AP	65339	10822	60	1105	302
4.94	1.12	1.09			K2III	66216	10912	28	1532	305
2.25	-0.28	-1.11	-0.06	-0.27	O5F	66811	10947	-39	3939	306
4.80	0.04	0.01	0.11	0.12	A2V	67006	11018	51	1391	307
4.98	1.08	0.00			G5II	68752	11184	-15	2324	311
3.52	1.48	1.78	1.13	1.91	K4III	69267	11254*	9	1917	312
5.13	0.46	-0.05			F6V	69897	11348	27	1589	1217
4.24	1.54	1.90	1.19	2.08	K5III	70272	11401	43	1815	314

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION HRS MIN SEC	PROPER MO- TION IN RA SEC/CENT	DECLINATION DEG MIN SEC	PROPER MO- TION IN DEC SEC/CENT
315	FPS CAR	8 22 1.371	-0.326	-59 25 54.72	1.52
319	RET VOL	8 25 28.837	-0.534	-66 3 23.93	-16.10
1222	29 CNC	8 27 17.021	-0.101	+14 17 28.47	-1.55
321	ETA CNC	8 31 19.308	-0.322	+20 31 25.23	-4.80
1223	DEL HYA	8 36 23.148	-0.453	+ 5 47 17.90	-1.16
1224	SIG HYA	8 37 30.183	-0.126	+ 3 25 35.56	-2.09
325	6 HYA	8 38 53.173	-0.606	-12 23 23.10	-0.57
1225	34 LYN	8 39 21.860	0.224	+45 55 9.50	8.74
1227	QMI VEL	8 39 36.345	-0.221	-52 50 10.23	1.91
1228	GAM CNC	8 41 53.913	-0.743	+21 33 20.77	-4.28
331	ETA CHA	8 42 10.906	-0.778	-78 52 36.72	2.13
327	ALP PYX	8 42 37.582	-0.143	-33 5 57.01	0.87
326	DEL CNC	8 43 19.340	-0.121	+18 14 36.36	-23.32
32A	IOT1 CNC	8 45 14.824	-0.180	+28 50 55.38	-4.49
1230	14 HYA	8 48 9.328	-0.162	- 3 21 11.36	-2.70
332	GAM PYX	8 49 30.740	-1.003	-27 37 12.69	8.25
334	RET HYA	8 54 7.520	-0.679	+ 6 2 15.76	1.05
338	RHO UMA	9 0 24.110	-0.357	+67 43 28.41	1.64
343	ALP VOL	9 2 4.362	0.067	-66 18 0.25	-10.17
1238	KAP CNC	9 6 26.863	-0.143	+10 45 56.25	-1.19
345	LAM VEL	9 7 6.715	-0.198	-43 20 6.25	1.22
1239	XI CNC	9 7 58.853	0.021	+22 8 36.05	-0.02
346	36 LYN	9 12 14.338	-0.259	+43 19 3.68	-3.58
348	RET CAR	9 12 56.682	-2.887	-69 37 5.41	10.30
347	THE HYA	9 13 6.954	0.857	+ 2 24 58.59	-31.31
351	TOT CAR	9 16 26.866	-0.247	-59 10 27.00	0.46
352	ALP LYN	9 19 35.777	-1.805	+34 29 41.50	1.35
1243	THE PYX	9 20 25.758	-0.092	-25 51 45.53	-1.07
353	KAP VEL	9 21 22.184	-0.094	-54 54 27.67	0.82
1245	28 HYA	9 24 11.987	-0.113	- 5 0 47.92	-1.47
354	ALP HYA	9 26 24.437	-0.119	- 8 33 14.23	2.76
356	FPS ANT	9 28 15.175	-0.205	-35 50 45.33	-0.71
355	23 UMA	9 29 39.131	1.609	+63 10 4.28	2.54
361	M VEL	9 30 29.487	-0.420	-56 55 41.15	-0.06
1246	XI LEO	9 30 39.174	-0.634	+11 24 24.47	-8.63
362	H CAR	9 31 26.184	-0.438	-72 58 27.98	-0.72
357	24 UMA	9 32 23.102	-1.229	+69 56 13.34	7.63
360	10 LMI	9 32 45.402	0.051	+36 30 17.60	-2.64
1250	TOT HYA	9 38 37.800	0.305	- 1 1 59.75	-6.88
364	KAP HYA	9 39 9.247	-0.224	-14 13 22.18	-2.42
365	QMI LEO	9 39 52.221	-0.966	+10 0 7.82	-4.03
1251	15 LEO	9 42 9.012	-0.143	+30 5 7.81	-10.50
366	THE ANT	9 43 7.811	-0.373	-27 39 32.69	2.99
367	FPS LEO	9 44 29.462	-0.330	+23 53 7.55	-1.50
368	IPS UMA	9 49 17.698	-3.809	+59 9 8.80	-15.48

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER
1.88	1.31	0.27			K0II	71129	11463	-59 1032	315
3.76	1.12	1.14			K2III	71878	11567	-65 933	319
5.90	0.19	0.14			A5V	71555	11584	14 1899	1222
5.33	1.24	1.39			K3III	72292	11687	20 2109	321
4.14	0.00	0.01	0.04	0.04	A1V	73262	11823	6 2001	1223
4.44	1.21	1.27	0.87	1.43	K2III	73471	11856	3 2026	1224
4.97	1.42	0.00			K4III	73840	11908	-11 2420	325
5.37	0.99	0.75			G8IV	73593	11903	46 1422	1225
3.62	-0.18	-0.66			B3IV	74195	11943	-52 1583	1227
4.67	0.01	0.02	0.07	0.06	A1V	74198	11982	21 1895	1228
5.46	-0.10	-0.34			B9IV	75416	12063	-78 372	331
3.69	-0.19	-0.88	-0.07	-0.23	R2II	74575	12018	-32 5651	327
3.94	1.08	0.99	0.78	1.32	K0III	74442	12022	18 2027	326
4.03	1.00	0.77	0.74	1.23	G8II	74739	12083	29 1824	328
5.30	-0.09	-0.34			AP	75333	12172	- 2 2699	1230
4.01	1.27	1.39	0.95	1.61	K4III	75691	12216	-27 5986	332
3.11	1.00	0.79	0.72	1.21	G8III	76294	12327	6 2060	334
4.76	1.56	1.88	1.44	2.70	M3III	76827	12447	68 551	338
4.00	0.15	0.12			A5V	78045	12532	-65 1065	343
5.23	-0.11	-0.43			AP	78316	12596	11 1984	1238
2.24	1.69	1.81	1.24	2.19	K5IB	78647	12623	-42 4990	345
5.14	0.97	0.80			K0III	78515	12635	22 2061	1239
5.32	-0.14	-0.48			B8IIIP	79158	12716	43 1893	346
1.68	0.00	0.02			A0III	80007	12764	-69 1023	348
3.88	-0.06	-0.13	0.01	-0.05	A0V	79469	12743*	2 2167	347
2.25	0.18	0.11			F0IB	80404	12831	-58 1465	351
3.14	1.55	1.91	1.21	2.12	M0III	80493	12880	35 1979	352
4.72	1.06	2.03	1.39	2.47	M1III	80874	12916	-25 7114	1243
2.49	-0.20	-0.74			R2IV	81188	12938	-54 2219	353
5.58	1.53	1.82			K5III	81420	12992	- 4 2616	1245
1.98	1.44	1.73	1.04	1.81	K3III	81797	13044	- 8 2680	354
4.50	1.44	1.68	1.02	1.77	M0III	82150	13091	-35 5724	356
3.66	0.33	0.10	0.34	0.52	F0IV	81937	13109	63 845	355
3.12	1.55	1.88			K5III	82668	13160	-56 2270	361
4.97	1.05	0.86			K0III	82395	13149	11 2053	1246
5.46	1.56	1.74			K2	83095	13205	-72 835	362
4.55	0.77	0.34	0.64	1.06	G2IV	82210	13171	70 565	357
5.01	1.05	0.88	0.70	1.15	K1III	83240	13203	37 2004	360
3.88	1.32	1.47	0.97	1.64	K3III	83618	13341	- 0 2231	1250
5.06	-0.16	-0.56	-0.06	-0.22	R5V	83754	13354	-13 2917	364
3.48	0.53	0.20	0.39	0.63	F6II	83808	13366	10 2044	365
5.62	0.12	0.09			A3V	84107	13406	30 1901	1251
4.78	0.51	0.34	0.48	0.79	F7V	84367	13425	-27 6881	366
2.97	0.80	0.46	0.66	1.06	G0II	84441	13443	24 2129	367
3.79	0.30	0.09	0.34	0.50	F2IV	84999	13540	59 1268	368

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
370	6 SEX	9	50	1.418	0.057	-	4	7 49.04	-3.19
371	MU LEO	9	51	24.065	-1.598	+26	7	14.24	-5.96
375	PHI VEL	9	56	1.063	-0.135	-54	27	10.87	0.46
374	19 LMI	9	56	13.143	-1.055	+41	10	14.10	-2.89
377	ETA ANT	9	57	50.305	-0.808	-35	46	32.42	-2.39
376	12 SEX	9	58	28.369	-0.463	+	3	30 0.11	1.70
378	PI LEO	9	58	56.732	-0.215	+	8	9 35.80	-2.64
1258	20 LMI	9	59	37.841	-4.139	+32	2	32.42	-43.24
1261	UPS2 HYA	10	3	57.262	-0.289	-12	56	52.25	0.96
379	FTA LEO	10	6	1.519	-0.012	+16	52	48.83	-0.58
380	ALP LEO	10	7	5.674	-1.695	+12	5	6.25	0.29
381	LAM HYA	10	9	24.995	-1.408	-12	14	5.93	-9.44
385	OME CAR	10	13	10.123	-0.629	-69	55	6.44	0.30
384	7ET LEO	10	15	21.439	0.134	+23	32	14.65	-1.21
383	IAM UMA	10	15	39.265	-1.509	+43	2	5.22	-4.24
1263	FPS SEX	10	16	26.170	-1.104	-	7	56 54.94	-0.08
1265	59G ANT	10	17	1.448	-0.116	-28	52	17.58	0.85
386	MU UMA	10	20	54.246	-0.739	+41	37	14.66	3.02
388	25 SEX	10	22	13.641	-0.355	-	3	57 8.30	-0.04
389	MU HYA	10	24	55.674	-0.918	-16	42	48.03	-8.33
392	ALP ANT	10	26	3.077	-0.588	-30	56	42.43	0.90
1270	DEL SEX	10	28	15.516	-0.344	-	2	36 56.97	-1.80
394	36 UMA	10	29	5.999	-2.134	+56	6	14.85	-3.46
396	RHO LEO	10	31	32.862	-0.059	+	9	25 49.90	-0.61
399	44 HYA	10	32	52.249	-0.090	-23	37	15.87	1.74
398	37 UMA	10	33	37.549	0.813	+57	12	24.25	3.53
401	GAM CHA	10	35	11.829	-1.310	-78	28	58.99	1.62
1275	37 LMI	10	37	22.359	0.007	+32	6	4.55	0.17
404	33 SEX	10	40	10.882	-0.933	-	1	36 54.03	-12.49
1277	78G ANT	10	41	36.275	-0.234	-32	35	22.91	-0.24
406	THE CAR	10	42	5.783	-0.324	-64	16	6.07	0.78
405	41 LMI	10	42	6.760	-0.844	+23	18	51.89	0.44
407	42 LMI	10	44	31.982	-0.188	+30	48	32.61	-4.16
411	DEL2 CHA	10	45	34.271	-2.135	-80	24	48.56	0.42
409	53 LEO	10	47	59.754	-0.035	+10	40	21.18	-2.84
410	MU HYA	10	48	26.319	0.626	-16	4	3.78	19.61
1281	41 SEX	10	49	5.718	-0.064	-	8	46 12.94	-1.82
412	46 LMI	10	51	58.356	0.691	+34	20	40.45	-28.33
414	TOT ANT	10	55	35.744	0.639	-37	0	30.61	-13.29
1282	47 UMA	10	58	7.569	-2.806	+40	33	31.36	5.18
1283	ALP CRT	10	58	36.164	-3.266	-18	10	14.49	12.48
1284	58 LEO	10	59	19.248	0.081	+	3	44 47.84	-2.00
416	BET UMA	11	0	24.127	0.978	+56	30	40.77	2.90
420	PSI UMA	11	8	19.121	-0.636	+44	37	44.28	-3.14
421	BET CRT	11	10	28.498	0.002	-22	41	40.30	-10.23

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM NUMBER	FK4 NUMBER
V	B-V	U-B	V-R	V-I					
6.00	0.17	0.09			A5III	85364	13558	- 3 2794	370
3.89	1.22	1.38	0.91	1.49	K2III	85503	13590	26 2019	371
3.54	-0.09	-0.63			R5II	86440	13711	-53 3075	375
5.12	0.45	0.00			F5V	86146	13700	41 2033	374
5.22	0.31	0.00			F0V	86629	13741	-35 6050	377
6.69	0.28	0.06			A5	86611		4 2276	376
4.70	1.60	1.92	1.39	2.49	M2III	86663	13755	8 2301	378
5.36	0.65	0.25			G4V	86728	13763	32 1964	1258
4.59	-0.09	-0.27	-0.01	-0.09	R8V	87504	13861	-12 3073	1261
3.53	-0.03	-0.23	0.12	0.13	A0IB	87737	13899	17 2171	379
1.36	-0.11	-0.36	0.00	-0.09	R7V	87901	13926*	12 2149	380
3.61	1.01	0.91	0.75	1.23	K0III	88284	13982	-11 2820	381
3.31	-0.08	-0.32			R8IV	89080	14074	-69 1178	385
3.44	0.32	0.21	0.32	0.50	F0III	89025	14107	24 2209	384
3.45	0.03	0.06	0.09	0.08	A2IV	89021	14113*	43 2005	383
5.24	0.32	0.13			F1III	89254	14129	- 7 3001	1263
5.34	0.24	0.00			R9	89353	14144	-28 8070	1265
3.03	1.58	1.86	1.27	2.24	M0III	89758	14232	42 2115	386
5.96	-0.10	-0.16			A0P	90044	14268	- 3 2911	388
3.81	1.48	1.82	1.11	1.94	K4III	90432	14326	-16 3052	389
4.24	1.45	1.63	1.10	1.89	M0III	90610	14352	-30 8465	392
5.22	-0.05	-0.12			R9	90882	14403	- 2 3155	1270
4.83	0.52	0.00	0.48	0.75	F8V	90839	14427	56 1459	394
3.85	-0.14	-0.95	-0.04	-0.21	R1IB	91316	14487*	10 2166	396
5.07	1.60	0.00			K4III	91550	14524	-22 2946	399
5.15	0.33	-0.02			F1V	91480	14527	57 1277	398
4.14	1.59	2.07			M0III	92305	14604	-77 622	401
4.67	0.82	0.53	0.66	1.05	G3II	92125	14624	32 2061	1275
6.25	0.88	0.59			K1IV	92588		- 0 2364	404
5.63	0.00	0.00			A0	92845	14732	-32 7572	1277
2.76	-0.23	-1.01			O9.5V	93030	14755	-63 1899	406
5.04	0.04	0.05			A2V	92825	14740	23 2253	405
5.35	-0.06	-0.15			B9V	93152	14798	31 2180	407
4.44	-0.20	-0.69			B3V	93845	14863	-79 556	411
5.25	0.01	0.05			A2V	93702	14889	11 2283	409
3.11	1.25	1.29	0.91	1.55	K3III	93813	14898	-15 3138	410
5.78	0.17	0.12			A2	93903	14906	- 8 3018	1281
3.81	1.05	0.91	0.83	1.37	K0III	94264	14961	34 2172	412
4.59	1.02	0.85	0.75	1.28	G5III	94890	15047	-36 6808	414
5.05	0.61	0.12			G0V	95128	15087	41 2147	1282
4.07	1.09	1.01	0.78	1.33	K0III	95272	15106	-17 3273	1283
4.84	1.17	1.12			K1III	95345	15125	4 2407	1284
2.38	-0.01	-0.02	0.08	0.04	A1V	95418	15145	57 1302	416
3.00	1.14	1.11	0.82	1.41	K1III	96833	15340	45 1897	420
4.47	0.03	0.06	0.09	0.12	A2III	97277	15385	-22 3095	421

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT			PROPER MO-		DECLINATION			PROPER MO-	
		ASCENSION	HRS MIN SEC		TION IN RA	SEC/CENT	DEG MIN SEC	TION IN DEC		SEC/CENT	
422	DEL LEO	11	12	49.985	1.015	+20	39	19.40	-13.54		
423	THE LEO	11	12	58.876	-0.421	+15	33	39.38	-8.35		
1292	PHI LEO	11	15	26.411	-0.747	- 3	31	12.80	-4.14		
1293	55 UMA	11	17	49.625	-0.492	+38	19	2.47	-7.40		
426	DEL CRT	11	18	8.311	-0.877	-14	38	54.56	20.15		
427	SIG LEO	11	19	53.908	-0.637	+ 6	9	39.82	-1.50		
1296	83 LEO	11	25	32.399	-4.833	+ 3	8	38.61	17.73		
1297	TAU LEO	11	26	42.143	0.112	+ 2	59	18.71	-1.69		
433	LAM DRA	11	29	59.726	-0.739	+69	27	49.18	-2.02		
434	XI HYA	11	31	49.067	-1.627	-31	43	28.72	-4.20		
436	LAM CEN	11	34	39.952	-0.572	-62	53	12.56	-0.81		
435	02 CEN	11	34	45.417	0.303	-47	30	30.36	-5.37		
1299	THE CRT	11	35	27.726	-0.452	- 9	40	9.89	0.32		
437	UPS LEO	11	35	43.128	0.009	- 0	41	28.17	3.82		
438	PI CHA	11	36	15.499	-3.577	-75	45	48.44	-0.09		
439	OMI HYA	11	39	1.002	-0.365	-34	36	41.41	-0.28		
1300	61 UMA	11	39	47.333	-0.104	+34	20	13.89	-38.79		
1301	7ET CRT	11	43	32.620	0.202	-18	13	2.10	-3.60		
442	LAM MUS	11	44	27.882	-1.620	-66	35	43.99	3.28		
1302	NU VIR	11	44	37.503	-0.137	+ 6	39	50.05	-18.75		
441	CHI UMA	11	44	47.255	-1.378	+47	54	44.97	2.43		
1304	93 LEO	11	46	44.880	-1.069	+20	21	8.41	-0.81		
444	RET LEO	11	47	50.138	-3.426	+14	42	22.45	-11.88		
445	RET VIR	11	49	26.639	4.935	+ 1	54	0.02	-27.47		
446	B CEN	11	49	56.292	-0.771	-45	2	23.90	-1.81		
447	GAM UMA	11	52	34.436	1.050	+53	49	41.41	0.68		
1308	95 LEO	11	54	26.480	0.062	+15	46	49.09	-0.40		
1309	FTA CRT	11	54	47.368	-0.394	-17	1	1.82	-1.09		
1311	PI VIR	11	59	38.542	-0.014	+ 6	44	53.19	-3.40		
450	OMI VIR	12	3	59.148	-1.491	+ 8	51	58.44	4.29		
452	DEL CEN	12	7	6.452	-0.344	-50	35	19.52	-1.25		
453	FPS CRV	12	8	53.208	-0.525	-22	29	10.61	1.00		
1313	3 COM	12	9	18.219	-0.135	+16	56	33.63	-0.62		
455	DEL CRU	12	13	51.644	-0.496	-58	36	55.28	-1.02		
456	DEL UMA	12	14	14.620	1.252	+57	9	56.90	0.43		
457	GAM CRV	12	14	34.114	-1.144	-17	24	31.50	1.77		
459	RET CHA	12	16	54.344	-1.544	-79	10	44.24	1.46		
460	FTA VIR	12	18	40.581	-0.434	- 0	32	0.70	-2.22		
1317	16 VIR	12	19	7.771	-1.956	+ 3	26	45.88	-6.96		
1318	12 COM	12	21	17.977	-0.085	+25	58	44.97	-1.43		
461	6 CVN	12	24	40.106	-0.703	+39	9	5.63	-3.72		
464	SIG CEN	12	26	44.058	-0.291	-50	5	52.50	-2.26		
466	20 COM	12	28	30.901	0.173	+21	1	43.66	-3.76		
467	74 UMA	12	28	50.354	-0.832	+58	32	15.41	8.83		
468	GAM CRU	12	29	49.480	0.351	-56	58	44.16	-26.70		

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM		FK4 NUMBER
V	B-V	U-B	V-R	V-I				NUMBER	NUMBER	
2.56	0.12	0.10	0.16	0.19	A4V	97603	15438	21	229A	422
3.34	0.00	0.00	0.08	0.05	A2V	97633	15441	16	2234	423
4.46	0.21	0.12	0.27	0.38	A7IV	9A05A	15511	- 2	3315	1292
4.77	0.10	0.04	0.14	0.16	A2V	9A353	15558	38	2225	1293
3.56	1.12	0.98	0.83	1.43	G8III	98430	15567	-13	3345	426
4.04	-0.05	-0.09	0.01	-0.06	B9V	98664	15600	6	2437	427
6.50	0.79	0.49			DK0	99491	15705	3	2502	1296
4.95	1.01	0.78			G8II	99648	15729	3	2504	1297
3.83	1.61	1.97	1.32	2.31	M0III	100029	15799	70	665	433
3.54	0.95	0.71	0.70	1.19	G7III	100407	15845	-31	9083	434
3.13	-0.05	-0.16			B9III	100841	15899	-62	2127	436
5.24	0.26	0.10			F2	100825	15901	-46	7205	435
4.70	-0.08	-0.18	0.03	-0.04	B9V	100889	15921	- 8	3202	1299
4.30	1.00	0.75	0.73	1.25	G9III	100920	15927	- 0	245A	437
5.64	0.36	-0.03			F2III	101132	15946	-75	744	438
4.70	-0.08	-0.20	0.02	-0.03	B8	101431	16019	-34	7610	439
4.33	0.73	0.26	0.59	0.95	G8V	101501	16035	35	2270	1300
4.73	0.98	0.74	0.71	1.19	G8III	102070	16112	-17	3460	1301
3.63	0.16	0.12			A5V	102249	16131	-66	1640	442
4.03	1.52	1.80	1.23	2.25	M1III	102212	16135	7	2479	1302
3.70	1.19	1.15	0.87	1.48	K0III	102224	16137	48	1966	441
4.54	0.55	0.28	0.51	0.87	G5III	102509	16173	21	235A	1304
2.14	0.09	0.07	0.06	0.07	A3V	102647	16189*	15	2383	444
3.61	0.55	0.10	0.46	0.74	F8V	102870	16215*	2	2489	445
4.46	1.29	1.46	0.94	1.61	K4III	102964	16226	-44	2614	446
2.44	0.00	0.01	0.05	0.02	A0V	103287	16268*	54	1475	447
5.50	0.11	0.11			A3V	10357A	16311	16	2319	1308
5.17	-0.03	-0.06			A0V	103632	16319	-16	3358	1309
4.65	0.13	0.11	0.16	0.20	A4V	104321	16425	7	2502	1311
4.12	0.98	0.63	0.74	1.23	G8III	104979	16512	9	2583	450
2.58	-0.11	-0.89	0.04	-0.08	B2VPE	105435	16584	-50	6697	452
2.99	1.33	1.48	0.93	1.58	K3III	105707	16618	-21	3487	453
6.37	0.08	0.11			A2V	10577A		17	2446	1313
2.82	-0.24	-0.90			B2IV	106490	16724	-58	4189	455
3.31	0.08	0.07	0.07	0.06	A3V	106591	16736*	57	1363	456
2.60	-0.11	-0.35	-0.02	-0.11	B8III	106625	16740*	-16	3424	457
4.28	-0.13	-0.53			B5IV	106911	16775	-7A	741	459
3.88	0.02	0.04	0.08	0.07	A2V	107259	16183	0	2926	460
4.95	1.17	1.15	0.88	1.49	K1III	107328	16828	4	2604	1317
4.81	0.50	0.26	0.47	0.79	G0III	107700	16873	26	2337	1318
5.01	0.96	0.73			G8III	10A225	16948	39	2521	461
3.92	-0.20	-0.79	-0.11	-0.30	B2V	10A483	16990	-49	7115	464
5.72	0.06	0.09			A3V	10A765	17026	21	2424	466
5.32	0.20	0.14			A5	10B844	17038	59	1444	467
1.66	1.61	1.76			M3II	10A903	17052	-56	5272	468

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA		DECLINATION			PROPER MO- TION IN DEC	
		HRS	MIN	SEC	SEC/CENT	DEG	MIN	SEC	SEC/CENT		
469	GAM MUS	12	31	0.844	-1.031	-72	0	1.96	-0.92		
472	KAP DRA	12	32	27.918	-1.156	+69	55	13.15	0.85		
470	RET CVN	12	32	36.277	-6.296	+41	29	15.57	28.72		
471	RET CRV	12	33	7.354	0.006	-23	15	50.97	-5.79		
1324	25 VIR	12	35	33.028	-0.224	-	5	41 59.21	-2.17		
474	ALP MUS	12	35	44.111	-0.747	-69	0	12.27	-1.59		
475	CHI VIR	12	38	0.294	-0.528	-	7	51 49.47	-3.11		
1326	RHO VIR	12	40	40.127	0.566	+10	22	3.54	-9.46		
1328	32 VIR	12	44	24.231	-0.738	+	7	48 15.55	0.02		
481	RET CRU	12	46	18.454	-0.506	-59	33	27.79	-1.69		
1330	35 VIR	12	46	37.992	-0.056	+	3	42 12.56	-0.75		
1332	31 COM	12	50	31.801	-0.101	+27	40	15.62	-1.33		
1335	PSI VIR	12	53	6.102	-0.188	-	9	24 31.95	-2.00		
484	DEL VIR	12	54	23.572	-3.144	+	3	31 39.27	-5.82		
486	8 DRA	12	54	31.416	-0.140	+65	34	6.13	-3.36		
487	DEL MUS	13	0	35.854	5.643	-71	25	11.50	-3.10		
488	FPS VIR	13	0	58.853	-1.867	+11	5	16.22	1.71		
1337	14 CVN	13	4	37.158	-0.268	+35	55	37.11	1.70		
489	XI2 CEN	13	5	30.009	-0.297	-49	46	40.64	-1.23		
492	RET COM	13	10	45.201	-6.048	+27	59	58.00	87.81		
493	ETA MUS	13	13	36.171	-0.584	-67	46	4.29	-1.68		
1344	SIG VIR	13	16	23.465	-0.048	+	5	35 45.40	1.12		
494	20 CVN	13	16	28.031	-1.114	+40	41	54.91	1.70		
1345	61 VIR	13	17	8.728	-7.542	-18	10	41.53	-107.25		
495	GAM HYA	13	17	36.753	0.475	-23	2	43.17	-4.90		
496	TOT CEN	13	19	14.501	-2.821	-36	35	9.98	-8.91		
1348	68 VIR	13	25	26.872	-0.917	-12	34	59.67	-2.51		
1349	70 VIR	13	27	15.296	-1.634	+13	54	23.36	-58.16		
1351	78 VIR	13	32	54.831	0.281	+	3	46 54.18	-2.87		
501	7ET VIR	13	33	28.066	-1.912	-	0	28 25.51	3.56		
1352	80 VIR	13	34	16.203	0.089	-	5	16 27.99	7.92		
504	FPS CEN	13	38	21.395	-0.246	-53	20	41.38	-1.74		
1355	82 VIR	13	40	20.975	-0.672	-	8	34 56.81	3.46		
1357	83 VIR	13	43	11.883	0.063	-16	3	32.17	-1.09		
506	1 CEN	13	44	19.073	-3.658	-32	55	22.52	-15.04		
509	ETA UMA	13	46	35.712	-1.281	+49	25	57.51	-1.43		
511	10 DRA	13	50	43.769	-0.056	+64	50	29.16	-0.63		
513	ETA BOO	13	53	32.439	-0.446	+18	31	2.82	-36.30		
512	7ET CEN	13	54	2.005	-0.565	-47	10	14.79	-4.40		
515	47 HYA	13	57	10.057	-0.360	-24	51	20.25	-3.10		
516	TAU VIR	14	0	25.360	0.108	+	1	39 36.28	-2.48		
521	ALP DRA	14	3	44.208	-0.902	+64	29	24.58	1.46		
519	PI HYA	14	4	59.978	0.319	-26	34	2.61	-14.40		
520	THE CEN	14	5	15.810	-4.287	-36	15	9.32	-52.35		
524	4 UMI	14	8	55.040	-1.076	+77	39	36.80	2.98		

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM		FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
3.87	-0.17	-0.61			B5V	109026	17086	-71	1336	469
3.87	-0.13	-0.56	0.05	-0.03	B7P	109387	17126	70	703	472
4.27	0.58	0.05	0.54	0.85	G0V	109358	17127	42	2321	470
2.67	0.89	0.61	0.61	1.05	G5II	109379	17133	-22	3401	471
5.86	0.70	0.08			A0	109704	17180	-5	3535	1324
2.70	-0.21	-0.82			R3IV	10966A	17179	-6A	1702	474
4.65	1.24	1.39	0.88	1.49	K2III	110014	17227	-7	3452	475
4.88	0.08	0.05	0.08	0.10	A2V	110411	17276	11	2485	1326
5.20	0.33	0.12			A6	110951	17346	8	2639	1328
1.27	-0.25	-1.00			R0III	111123	17374	-59	4451	481
6.40	1.06	1.82			A5	111239		4	2653	1330
4.94	0.67	0.21	0.52	0.87	G0III	111812	17455	2A	2156	1332
4.80	1.59	1.57	1.56	2.83	M3III	112142	17516	-8	3449	1335
3.37	1.57	1.76	1.55	2.88	M3III	112300	17543	4	2669	484
5.24	0.28	0.02			A5	112429	17554	66	77A	486
3.61	1.18	1.26			K2III	112985	17672	-70	154A	487
2.83	0.93	0.73	2.68	1.09	G9III	113226	17687	11	2529	488
5.20	-0.09	-0.21			R9V	113797	17751	36	2337	1337
4.26	-0.20	-0.76	-0.08	-0.28	R2V	113791	17773	-49	7644	489
4.28	0.57	0.07	0.48	0.77	G2V	114710	17874*	28	2193	492
4.79	-0.09	-0.34			R8V	114911	17927	-67	2224	493
4.79	1.66	1.95			G2	115521	17995	6	2722	1344
4.72	0.30	0.20	0.25	0.40	F0IIP	115604	18000	41	2380	494
4.75	0.71	0.25	0.58	0.94	G6V	115617	18007*	-17	3813	1345
2.98	0.92	0.65	0.63	1.09	G8III	115659	18012	-22	3554	495
2.75	0.04	0.04	0.06	0.05	A2V	115892	18039	-36	8497	496
5.23	1.50	1.72			M0III	116870	18168	-11	3516	1348
4.98	0.71	0.26	0.61	0.97	G5V	117176	18212*	14	2621	1349
4.93	0.03	0.00	0.06	0.04	A2P	118022	18335	4	2764	1351
3.36	0.11	0.11	0.07	0.13	A3V	118098	18351	0	3076	501
5.72	0.95	0.66			G6III	118219	18366	-4	3515	1352
2.30	-0.24	-0.92	-0.15	-0.40	R1IV	118716	18458	-52	6655	504
5.00	1.63	1.93			M2III	119149	18509	-7	3674	1355
5.57	0.80	0.00			G0II	119605	18568	-15	3731	1357
4.23	0.38	-0.02	0.34	0.55	F2III	119756	18593	-32	9603	506
1.88	-0.19	-0.68	-0.07	-0.26	R3V	120315	18643	50	2027	509
4.59	1.60	1.86	1.58	2.95	M3	121130	18750	65	963	511
2.69	0.58	0.19	0.45	0.74	G0IV	121370	18805*	19	2725	513
2.54	-0.23	-0.90	-0.13	-0.34	B2IV	121263	18809	-46	8949	512
5.15	-0.10	-0.40			R8	121847	18887	-241	1202	515
4.26	0.10	0.10	0.14	0.20	A3III	122408	18945	2	2761	516
3.65	-0.05	-0.09	-0.03	-0.10	A0III	123299	19019	65	978	521
3.26	1.12	1.04	0.87	1.42	K2III	123123	19029	-261	10095	519
2.08	1.01	0.85	0.76	1.29	K0III	123139	19033	-35	9260	520
4.82	1.36	0.00			K3III	124547	19142	78	478	524

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION HRS MIN SEC	PROPER MO- TION IN RA SEC/CENT	DECLINATION DEG MIN SEC	PROPER MO- TION IN DEC SEC/CENT
522	12 BOO	14 9 18.201	-0.171	+25 12 17.13	-6.42
523	KAP VIR	14 11 36.718	0.035	-10 9 45.61	13.59
526	ALP BOO	14 14 33.906	-7.732	+19 18 24.40	-200.08
525	TOT VIR	14 14 45.199	-0.055	- 5 53 11.84	-43.21
528	TOT BOO	14 15 18.883	-1.650	+51 28 38.77	8.77
527	LAM BOO	14 15 28.241	-1.833	+46 11 52.76	15.76
1370	A BOO	14 16 58.871	-0.020	+35 37 10.70	1.07
1371	LAM VIR	14 17 48.437	-0.128	-13 15 40.85	2.41
1372	18 BOO	14 18 6.489	0.723	+13 6 51.66	-3.48
529	V CEN	14 18 38.152	-0.166	-56 16 36.77	-1.80
1373	PSI CEN	14 19 5.400	-0.575	-37 46 32.53	-1.60
1374	2 LIB	14 22 7.909	-0.086	-11 36 18.61	-6.34
531	THE BOO	14 24 22.697	-2.605	+51 57 40.26	-40.07
1379	5 UMI	14 27 33.345	0.119	+75 48 9.56	2.05
534	RHO BOO	14 30 47.662	-0.792	+30 28 34.10	11.64
1380	SIG BOO	14 33 38.055	1.447	+29 50 55.42	12.89
540	33 BOO	14 37 56.568	-0.662	+44 30 27.10	-1.99
541	ALP LUP	14 40 19.468	-0.175	-47 17 9.80	-1.98
539	ALP CIR	14 40 32.895	-2.912	-64 52 18.48	-23.84
1382	32 BOO	14 40 34.231	-1.070	+11 45 47.83	-11.77
545	MU VIR	14 41 47.540	0.708	- 5 33 16.81	-32.10
542	ALP APS	14 44 48.458	-0.084	-78 56 40.59	-1.82
547	109 VIR	14 45 1.979	-0.763	+ 1 59 35.46	-3.11
1387	ALP1 LIB	14 49 21.306	-0.701	-15 53 54.05	-7.24
548	ALP2 LIB	14 49 32.807	-0.746	-15 56 34.42	-7.13
550	RET UMI	14 50 45.487	-0.858	+74 15 12.88	0.99
1390	XI2 LIB	14 55 27.741	0.045	-11 18 49.35	0.39
552	RET LUP	14 56 57.111	-0.344	-43 2 17.85	-4.30
555	RET BOO	15 1 2.414	-0.404	+40 29 4.39	-3.24
556	SIG LIB	15 2 39.640	-0.537	-25 11 18.87	-4.68
557	PSI BOO	15 3 24.942	-1.317	+27 2 25.69	-0.89
1396	45 BOO	15 6 14.722	1.357	+24 57 42.61	-17.08
1398	KAP1 LUP	15 10 15.399	-0.973	-48 38 51.53	-4.98
558	RET LUP	15 10 33.052	-1.161	-52 0 32.30	-6.99
559	TOT LIB	15 10 50.939	-0.267	-19 42 6.68	-4.34
1399	1 LUP	15 13 8.783	-0.035	-31 25 50.09	-0.35
562	3 SER	15 13 59.629	-0.125	+ 5 1 39.30	0.10
561	RET CIR	15 15 37.307	-1.216	-58 42 46.35	-13.99
564	RET LIB	15 15 42.725	-0.662	- 9 17 43.09	-2.36
560	GAM TRA	15 16 38.777	-1.102	-68 35 32.48	-3.16
1402	DEL LUP	15 19 47.379	-0.137	-40 33 42.54	-3.17
566	PHI1 LUP	15 20 16.615	-0.747	-36 10 31.35	-8.74
569	GAM UMI	15 20 45.162	-0.509	+71 55 9.86	1.87
1403	PHI2 LUP	15 21 36.964	-0.151	-36 46 24.59	-2.50
1406	8 SER	15 22 29.302	0.495	- 0 56 15.74	-3.27

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM		FK4 NUMBER
V	B-V	U-B	V-R	V-I				NUMBER	NUMBER	
4.83	0.53	0.07	0.44	0.73	F8IV	123999	19127	25	2737	522
4.18	1.33	1.47	1.07	1.82	K3III	124294	19168	- 9	3878	523
0.05	1.23	1.26	0.98	1.64	K2III	124897	19242	19	2777	526
4.08	0.51	0.03	0.49	0.77	F7IV	124850	19244	- 5	3843	525
4.75	0.22	0.09	0.15	0.24	A7V	125161	19269	52	1784	528
4.18	0.08	0.05	0.02	0.05	A0P	125162	19273	96	1949	527
4.80	1.06	0.91	0.76	1.29	K0III	125351	19296	36	2468	1370
4.52	0.13	0.11	0.10	0.13	A8M	125337	19311	-12	4018	1371
5.40	0.37	-0.04			F5IV	125451	19319	13	2782	1372
4.32	0.12	-0.45			R5II	125288	19318	-55	8984	529
4.04	-0.03	-0.11	0.01	-0.03	A0IV	125473	19337	-37	9336	1373
6.27	0.63	0.08			G3	126053		1	2920	1374
4.05	0.49	0.01	0.43	0.68	F7V	126660	19467	52	1804	531
4.26	1.43	1.70	1.06	1.81	K4III	127700	19548	76	527	1379
3.57	1.29	1.44	0.92	1.57	K3III	127665	19597	31	2628	534
4.46	0.35	-0.08	0.34	0.53	F2V	128167	19659	30	2536	1380
5.31	-0.01	-0.04			A0	129002	19747	45	2204	540
2.31	-0.21	-0.88	-0.08	-0.25	B1V	129056	19774	-46	9501	541
3.18	0.24	0.15			F0III	128898	19772	-64	2977	539
5.55	0.94	0.66			G8III	129336	19793	12	2729	1382
3.88	0.38	-0.03	0.40	0.61	F3IV	129502	19816	- 5	3936	545
3.85	1.44	1.68			K5III	129078	19834	-78	893	542
3.74	0.00	-0.03	0.07	0.05	A0V	130109	19884*	2	2862	547
5.16	0.41	-0.04			F5IV	130819	19970*	-15	3965	1387
2.75	0.15	0.08	0.17	0.21	AM	130841	19975*	-15	3966	548
2.07	1.46	1.78	1.10	1.87	K4III	131873	20029	74	595	550
5.46	1.49	0.00			K4III	131918	20096	-10	3989	1390
2.67	-0.22	-0.85	-0.09	-0.26	B2IV	132058	20128	-42	9853	552
3.49	0.96	0.71	0.65	1.10	G8III	133208	20226	40	2840	555
3.32	1.68	1.92	1.53	2.82	M4III	133216	20253	-241	11834	556
4.52	1.25	1.33	0.93	1.58	K2III	133582	20285	27	2447	557
4.93	0.42	-0.02	0.38	0.60	F5V	134083	20342	25	2873	1396
3.86	-0.05	-0.10	-0.03	-0.05	B9V	134481	20409	-48	9704	1398
3.40	0.92	0.67			G8III	134505	20418	-51	8830	558
4.53	-0.09	-0.35	-0.04	-0.13	AP	134759	20433	-19	4047	559
4.90	0.38	0.26	0.37	0.68	F0I	135153	20480	-311	11813	1399
5.32	1.10	0.91			GK0	135482	20501	5	2985	562
4.06	0.09	0.08			A3V	135379	20526	-58	5875	561
2.61	-0.11	-0.37	-0.04	-0.13	B8V	135742	20539*	- 8	3935	564
2.89	0.00	-0.01			A0V	135382	20538	-68	2383	560
3.21	-0.23	-0.87	-0.11	-0.33	B2IV	136298	20620	-40	9538	1402
3.55	1.53	1.87	1.19	2.06	K5III	136422	20643	-351	10236	566
3.04	0.05	0.09	0.11	0.17	A3II	137422	20692	72	679	569
4.53	-0.15	-0.61	-0.03	-0.17	B5V	136664	20676	-361	10103	1403
6.14	0.24	0.07			F0V	137006	20697	- 0	2961	1406

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
560	MU BOO	15	23	34.929	-1.245	+37	27	38.13	8.32
571	IOT DRA	15	24	23.485	-0.199	+59	2	58.76	1.33
570	TAU1 SER	15	24	40.484	-0.099	+15	30	41.54	-1.18
572	RET CRB	15	26	50.267	-1.375	+29	11	15.58	8.29
567	KAP1 APS	15	28	51.856	0.081	-73	18	29.56	-1.89
576	THE CRB	15	31	57.604	-0.174	+31	26	21.47	-1.50
1409	37 LIR	15	32	51.776	2.057	- 9	58	59.95	-24.08
577	GAM LIB	15	34	10.793	0.429	-14	42	38.00	0.31
574	FPS TRA	15	34	30.298	0.486	-66	14	16.98	-6.51
580	PHI BOO	15	36	57.770	0.517	+40	25	51.17	5.91
1413	KAP LIR	15	40	33.581	-0.270	-19	36	7.64	-10.74
582	ALP SER	15	43	5.012	0.909	+ 6	30	0.78	4.48
590	ZET UMI	15	44	52.870	0.447	+77	52	8.15	-0.34
584	KAP SER	15	47	39.452	-0.349	+18	12	53.23	-9.13
585	MU SER	15	48	21.891	-0.596	- 3	21	28.07	-2.78
586	CHI LUP	15	49	25.689	-0.071	-33	33	18.84	-3.22
588	FPS SER	15	49	37.029	0.839	+ 4	32	56.49	6.16
1414	KAP CRB	15	50	19.549	-0.091	+35	43	51.71	-35.13
1416	CHI HER	15	51	50.624	3.937	+42	31	4.84	62.95
1415	LAM LIB	15	51	56.224	-0.082	-20	5	47.10	-2.70
589	RET TRA	15	53	0.771	-2.758	-63	21	29.28	-39.70
591	GAM SER	15	55	20.531	2.134	+15	44	20.53	-128.44
592	PI SCO	15	57	23.745	-0.074	-26	2	46.03	-2.67
594	DEL SCO	15	58	54.624	-0.073	-22	33	16.21	-2.51
1419	49 LIR	15	58	58.546	-4.414	-16	27	49.54	-39.75
1420	50 LIR	15	59	29.693	-0.120	- 8	20	40.51	-1.83
598	THE DRA	16	1	26.098	-4.178	+58	37	44.22	33.48
596	DEL NOR	16	4	47.252	0.019	-45	6	33.98	2.67
599	THE LUP	16	5	0.636	-0.158	-36	44	17.70	-3.35
1421	KAP HER	16	6	59.415	-0.225	+17	6	35.70	-1.08
601	PHI HER	16	8	0.664	-0.285	+44	59	49.75	3.53
603	DEL OPH	16	13	5.103	-0.314	- 3	38	0.93	-14.51
602	DEL TRA	16	13	14.407	0.149	-63	37	33.93	-1.42
606	19 UMI	16	11	29.197	-0.188	+75	56	18.73	1.23
605	FPS OPH	16	17	2.917	0.542	- 4	38	6.26	3.88
604	GAM2 NOR	16	18	2.212	-1.624	-50	5	53.36	-5.54
612	FTA UMI	16	18	11.156	-2.376	+75	48	39.97	24.97
1427	SIG SER	16	20	51.270	-1.046	+ 1	5	3.83	4.87
1428	23 HER	16	22	1.083	0.139	+32	23	17.42	-1.02
610	RET TRA	16	25	52.131	4.043	-70	1	57.07	10.21
619	A DRA	16	28	1.270	-0.583	+68	49	12.21	3.41
618	RET HER	16	29	11.177	-0.708	+21	32	27.43	-1.73
611	GAM APS	16	29	43.316	-4.035	-78	50	46.30	-7.01
621	SIG HER	16	33	19.627	-0.132	+42	29	8.93	4.37
620	TAU SCO	16	34	23.076	-0.061	-28	10	3.07	-2.46

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBFR	NUMBER	NUMBER	NUMBER
4.31	0.32	0.07	0.32	0.46	F0IV	137391	20724	37 2636	568
3.30	1.17	1.22	0.78	1.38	K2III	137759	20747	59 1654	571
5.17	1.66	1.95			M1III	137471	20740	15 285A	570
3.67	0.27	0.12	0.19	0.23	F0P	137909	20795	29 2670	572
5.48	-0.13	-0.76			B3IV	137387	20801	-72 1802	567
4.16	-0.13	-0.55	-0.05	-0.16	R6E	13A749	20908	31 2750	576
4.61	1.01	0.87	0.75	1.28	K1IV	13A716	20914	- 9 4171	1409
3.90	1.01	0.75	0.73	1.28	G8III	138905	20949	-14 4237	577
4.10	1.16	1.16			K0III	138538	20932	-65 3102	574
5.24	0.88	0.53			G8III	139641	21032	40 2907	580
4.72	1.57	1.96	1.26	2.21	K5III	139997	21094	-19 418A	1413
2.65	1.16	1.24			K2III	140573	21158*	6 3088	582
4.30	0.03	0.06	0.07	0.08	A3V	142105	21243	78 527	590
4.10	1.62	1.95	1.30	2.27	M1III	141477	21255	1A 3074	584
3.54	-0.04	-0.11	0.00	-0.05	A0V	141513	21269	- 2 4052	585
3.94	-0.05	-0.12	-0.01	-0.08	A0IV	141556	21281	-3310754	586
3.71	0.15	0.10	0.08	0.13	AM	141795	21288	4 3069	588
4.81	1.00	0.87	0.76	1.25	K0III	142091	21319	36 2652	1414
4.61	0.55	0.01	0.48	0.80	F9V	142373	21340	42 264A	1416
5.01	-0.01	-0.58	0.01	-0.04	B3V	142096	21327	-19 4249	1415
2.84	0.30	0.02			F2IV	141891	21332	-63 3723	589
3.85	0.48	-0.03	0.47	0.72	F6V	142860	21408*	16 2849	591
2.90	-0.19	-0.89	-0.09	-0.29	B1V	14301A	21447	-2511228	592
2.32	-0.11	-0.91	-0.04	-0.17	B0V	143275	21489	-22 406A	594
5.46	0.52	0.02			F8V	143333	21495	-16 4196	1419
5.54	0.05	-0.05			A1	143459	21502	- 7 4162	1420
4.01	0.53	0.10	0.46	0.71	F8IV	144284	21572	58 160A	598
4.72	0.23	0.13	0.21	0.34	A7M	144197	21615	-4410625	596
4.21	-0.19	-0.68	-0.09	-0.26	R2V	144294	21625	-3610642	599
5.00	0.95	0.61			G8III	145001	21696	17 2964	1421
4.25	-0.06	-0.27	0.00	-0.09	R9P	145389	21736	45 2376	601
2.73	1.59	1.95	1.29	2.32	M1III	146051	21838	- 3 3903	603
7.65	0.13	-0.09			R9V	145544	21819	-63 3854	602
5.51	-0.15	-0.46			B8V	146926	21851	76 594	606
3.23	0.96	0.75	0.70	1.19	G9III	146791	21920	- 4 4086	605
4.04	1.07	1.17	0.77	1.35	G8III	146686	21933	-4910536	604
4.94	0.37	0.00			A8	14804A	21999	16 596	612
4.81	0.34	0.02	0.28	0.43	F0V	147449	22007	1 3215	1427
6.40	0.08	0.12			A3V	147835	22040	32 2716	1428
4.89	0.55	0.02			G0V	147584	22089	-69 255A	610
4.97	-0.06	-0.12	0.04	0.01	R9IV	149212	22194	69 850	619
2.78	0.94	0.67	0.64	1.11	G8III	148856	22193	21 2934	618
3.88	0.91	0.62			K0IV	147675	22142	-78 1103	611
4.21	-0.02	-0.10	0.03	0.02	R9V	149630	22296	42 2724	621
2.83	-0.25	-1.02	-0.11	-0.36	B0V	14943A	22303	-2711015	620

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT	
		HRS	MIN	SEC		DEG	MIN	SEC		
1433	12 OPH	16	35	5.644	3.031	-	2	16	28.29	-31.36
622	7ET OPH	16	35	50.066	0.076	-10	31	10.82		2.26
1434	42 HER	16	38	5.609	-0.516	+48	58	29.07		3.11
626	ETA HER	16	42	4.270	0.284	+38	58	1.90		-8.28
625	ALP TRA	16	46	6.599	0.527	-68	59	8.84		-3.33
1435	ETA ARA	16	47	42.279	0.533	-59	0	1.26		-3.08
143A	20 OPH	16	48	30.194	0.633	-10	44	30.41		-9.62
628	FPS SCO	16	48	36.308	-4.915	-34	15	3.74		-25.64
1440	51 HER	16	50	45.464	0.090	+24	41	45.13		0.53
1442	TOT OPH	16	52	52.216	-0.355	+10	12	13.66		-3.79
633	KAP OPH	16	56	31.808	-1.987	+	9	24	40.74	-1.02
631	7ET ARA	16	56	37.648	-0.155	-55	57	14.16		-3.53
634	EPS HER	16	59	22.166	-0.375	+30	57	39.30		2.77
1445	30 OPH	16	59	47.499	-0.290	-	4	11	15.99	-7.62
1446	59 HER	17	0	43.068	-0.014	+33	36	7.71		-0.15
635	60 HER	17	4	15.793	0.341	+12	46	21.99		-1.07
639	7ET DRA	17	8	42.727	-0.403	+65	44	38.80		2.08
638	ETA SCO	17	10	25.807	0.219	-43	12	32.40		-28.45
643	PI HER	17	14	12.551	-0.250	+36	50	7.47		0.28
1456	72 HER	17	19	45.539	1.020	+32	29	51.85		-104.24
644	THE OPH	17	20	31.987	-0.020	-24	58	36.83		-2.13
645	RET ARA	17	23	18.026	-0.011	-55	30	32.25		-2.44
1457	44 OPH	17	24	54.124	0.005	-24	9	16.35		-11.64
1459	SIG OPH	17	25	19.306	0.010	+	4	9	36.27	0.55
646	45 OPH	17	25	49.161	0.159	-29	50	48.18		-13.96
648	DEL ARA	17	28	55.656	-0.645	-60	39	56.42		-9.38
649	IPS SCO	17	29	7.750	-0.009	-37	16	41.37		-3.19
1460	LAM HER	17	29	45.999	0.130	+26	7	40.26		1.91
651	ALP ARA	17	29	59.002	-0.247	-49	51	31.78		-7.12
655	MU1 DRA	17	31	42.016	1.626	+55	12	0.76		5.57
657	MU2 DRA	17	31	47.468	1.650	+55	11	19.67		5.43
652	LAM SCO	17	31	58.584	0.014	-37	5	15.93		-2.88
659	27 DRA	17	32	3.340	-0.329	+68	9	1.43		13.42
656	ALP OPH	17	33	49.114	0.808	+12	34	35.26		-22.69
654	THE SCO	17	35	35.491	0.147	-42	59	2.64		0.06
658	XI SER	17	36	12.603	-0.309	-15	23	5.07		-6.10
664	OME DRA	17	37	5.246	-0.059	+68	46	9.02		32.24
663	TOT HER	17	38	47.105	-0.096	+46	1	6.39		0.41
660	KAP SCO	17	40	49.480	-0.057	-39	1	9.10		-2.88
1463	58 OPH	17	41	59.381	-0.679	-21	40	22.44		-4.63
662	MU ARA	17	42	14.168	-0.130	-51	49	22.78		-19.33
665	RET OPH	17	42	17.105	-0.279	+	4	34	34.27	15.85
661	ETA PAV	17	43	22.435	-0.047	-64	42	51.89		-5.20
666	TOT1 SCO	17	45	54.218	0.007	-40	7	9.21		-0.64
668	GAM OPH	17	46	41.241	-0.163	+	2	42	54.63	-7.40

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER
5.75	0.83	0.49			K0V	149661	22321	- 2 4211	1433
2.56	0.02	-0.86	0.10	0.06	O9.5V	149757	22332*	-10 4350	622
4.90	1.55	0.00			G2	150450	22412	49 2531	1434
3.53	0.92	0.60	0.67	1.15	G7III	150997	22502	39 3029	626
1.93	1.45	1.51			K3III	150798	22558	-68 2822	625
3.75	1.56	1.93			K5III	151249	22606	-58 6906	1435
4.65	0.47	0.05	0.44	0.69	F5IV	151769	22643	-10 4394	1438
2.30	1.15	1.16	0.86	1.46	K2III	151680	22640	-3411285	628
5.04	1.25	1.29			K2II	152326	22708	24 3069	1440
4.37	-0.09	-0.33	-0.09	-0.17	R8V	152614	22775	10 3092	1442
3.20	1.15	1.19	0.83	1.39	K2III	153210	22862	9 3298	633
3.12	1.60	1.96			K5III	152786	22845	-55 7766	631
3.91	-0.02	-0.11	-0.01	-0.05	R9.5V	153808	22935	31 2947	634
4.81	1.48	1.83			K4III	153687	22937	- 4 4215	1445
5.25	0.08	0.03			A3III	154029	22975	33 2817	1446
4.90	0.13	0.09	0.12	0.14	A3IV	154494	23061	12 3142	635
3.18	-0.13	-0.43	-0.05	-0.17	R6III	155763	23182	65 1170	639
3.33	0.41	0.07	0.36	0.56	F0IV	155203	23180	-4311485	638
3.16	1.43	1.66	0.96	1.68	K3II	156283	23302	36 2844	643
5.40	0.62	0.07			G0V	157214	23446	32 2896	1456
3.28	-0.21	-0.84	-0.11	-0.33	R2IV	157056	23451	-2413292	644
2.84	1.46	1.56			K3IB	157244	23515	-55 8100	645
4.17	0.28	0.10	0.26	0.38	A9V	157792	23597	-2413337	1457
4.34	1.50	1.62	1.08	1.85	K3II	157999	23621	4 3422	1459
4.29	0.40	0.07	0.35	0.52	F5IV	157919	23627	-2913557	646
3.59	-0.10	-0.30			R8V	158094	23681	-60 6842	648
2.70	-0.23	-0.82	-0.16	-0.40	R3IB	158408	23693	-3711638	649
4.40	1.44	1.68	1.06	1.82	K4III	158899	23726	26 3034	1460
2.94	-0.18	-0.68	-0.10	-0.34	R2.5VE	158427	23708	-4911511	651
4.88	0.27	0.06	0.24	0.37	AM	159541	23797	55 1944	655
4.88	0.27	0.06	0.24	0.36	AM	159560	23801	55 1945	657
1.62	-0.21	-0.90	-0.17	-0.45	R1V	158926	23769	-3711673	652
5.06	1.08	0.92			K0III	159966	23821	68 938	659
2.08	0.15	0.10	0.14	0.22	A5III	159561	23837*	12 3252	656
1.86	0.40	0.15	0.35	0.55	F0IB	159532	23857	-4212312	654
3.54	0.26	0.12	0.20	0.33	F0IV	159676	23881	-15 4621	658
4.80	0.42	-0.01	0.41	0.63	F5V	160922	23944	68 949	664
3.80	-0.18	-0.69	-0.10	-0.27	R3V	160762	23965	46 2349	663
2.41	-0.22	-0.89	-0.08	-0.30	B2IV	160578	23988	-3812137	660
4.87	0.46	-0.03	0.39	0.63	F5V	160915	24030	-21 4712	1463
5.12	0.70	0.00			G5V	160691	24024	-5111094	662
2.77	1.16	1.24	0.81	1.38	K2III	161096	24048*	4 3489	665
3.62	1.20	1.15			K0	160635	24044	-64 3662	661
3.03	0.52	0.25			F2IA	161471	24125	-4011838	666
3.75	0.04	0.04	0.05	0.06	A0V	161868	24162*	2 3403	668

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
669	G SCO	17	48	13.370	0.453	-37	2	13.51	3.40
675	35 DRA	17	50	31.154	0.971	+76	58	1.21	24.62
671	YI DRA	17	53	6.669	1.060	+56	52	33.53	7.80
1468	89 HER	17	54	26.981	0.016	+26	3	10.51	0.68
672	THE HER	17	55	25.682	0.007	+37	15	10.43	0.61
676	GAM DRA	17	56	2.799	-0.138	+51	29	28.34	-1.98
674	YI HER	17	56	49.835	0.641	+29	14	58.54	-1.67
673	NU OPH	17	57	42.209	-0.060	- 9	46	19.03	-11.86
1469	93 HER	17	58	59.215	-0.049	+16	45	4.40	-1.19
679	GAM SGR	18	4	15.883	-0.406	-30	25	32.82	-18.50
1471	THE ARA	18	4	45.646	-0.114	-50	5	41.46	-1.71
680	72 OPH	18	6	12.611	-0.422	+ 9	33	33.76	8.09
1473	FPS TEL	18	9	26.799	-0.142	-45	57	36.32	-3.14
685	36 DRA	18	13	45.377	5.262	+64	23	20.33	3.37
1474	6G TEL	18	15	6.140	-0.073	-56	1	57.65	-1.25
1477	KAP LYR	18	19	1.124	-0.158	+36	3	10.63	4.27
687	DEL SGR	18	19	27.410	0.306	-29	50	23.13	-2.89
1476	74 OPH	18	19	40.076	-0.009	+ 3	21	54.91	0.99
688	ETA SER	18	20	3.976	-3.688	- 2	54	22.31	-69.88
695	CHI DRA	18	21	29.290	11.762	+72	43	22.27	-35.18
689	FPS SGR	18	22	34.714	-0.257	-34	23	50.90	-12.55
690	109 HER	18	22	40.420	1.397	+21	45	28.24	-24.32
691	ALP TEL	18	25	11.610	-0.135	-45	58	59.34	-4.63
692	LAM SGR	18	26	29.311	-0.317	-25	26	10.71	-18.47
696	GAM SCT	18	27	49.697	0.007	-14	34	56.74	-0.53
1480	60 SER	18	28	25.949	0.199	- 2	0	7.19	-3.33
697	THE CRA	18	31	47.312	0.278	-42	19	52.82	-2.05
1482	ALP SCT	18	33	53.983	-0.125	- 8	15	43.39	-31.19
699	ALP LYR	18	36	7.467	1.701	+38	45	37.90	28.53
698	7ET PAV	18	40	14.377	0.184	-71	27	4.62	-15.75
702	FPS SCT	18	42	12.759	0.137	- 8	18	0.50	0.74
1487	PHI SGR	18	44	9.386	0.405	-27	1	0.49	0.08
1489	RET SCT	18	45	53.991	-0.051	- 4	46	29.03	-1.66
1491	111 HER	18	45	57.587	0.513	+18	9	13.55	11.51
1490	FTA1 CRA	18	47	6.569	0.225	-43	42	27.73	-1.69
1494	50 DRA	18	47	9.070	-0.537	+75	24	23.21	7.61
704	LAM PAV	18	49	59.815	0.005	-62	13	1.78	-1.76
707	OMI DRA	18	50	50.755	0.951	+59	21	31.30	2.73
706	SIG SGR	18	53	46.610	0.105	-26	19	40.33	-5.39
714	HPS DRA	18	54	41.663	0.931	+71	15	55.52	4.53
710	YI2 SGR	18	56	17.852	0.230	-21	8	22.17	-1.17
713	GAM LYR	18	58	2.642	-0.048	+32	39	20.80	0.17
712	FPS AQL	18	58	31.914	-0.359	+15	2	4.84	-7.34
717	LAM AQL	19	4	58.447	-0.144	- 4	55	10.78	-8.83
1496	TAU SGR	19	5	26.505	-0.396	-27	42	24.62	-24.95

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER
3.70	1.16	1.19			K2III	161892	24188	-3711907	669
5.01	0.50	0.00			F6IV	163989	24343	76 667	675
3.74	1.18	1.22	0.85	1.43	K2III	163588	24364	56 2033	671
5.45	0.34	0.29	0.31	0.52	F2IA	163506	24382	26 3120	1468
3.84	1.35	1.46	0.90	1.52	K1II	163770	24415	37 2982	672
2.23	1.52	1.87	1.16	2.02	K5III	164058	24432	51 2282	676
3.70	0.94	0.69	0.71	1.17	G9III	163993	24448	29 3156	674
3.34	0.99	0.88	0.72	1.20	G9III	163917	24468	- 9 4632	673
4.66	1.26	1.23	0.84	1.46	K0III	164349	24502	16 3335	1469
2.99	1.01	0.74	0.73	1.24	K0III	165135	24632	-3015215	679
3.67	-0.08	-0.89			B1II	165024	24635	-5011720	1471
3.73	0.13	0.10	0.10	0.15	A4V	165777	24695	9 3564	680
4.53	1.00	0.79	0.70	1.18	G5III	166063	24767	-4512251	1473
5.02	0.38	0.00			F5V	168151	24916	64 1252	685
5.34	-0.06	0.00			B3V	167128	24906	-58 8706	1474
4.32	1.17	1.20	0.86	1.41	K2III	168775	25032	36 3094	1477
2.70	1.38	1.53	1.00	1.08	K2III	168454	25024	-2914834	687
4.85	0.91	0.61	0.67	1.12	G8III	168656	25036	3 3680	1476
3.26	0.95	0.66	0.69	1.19	K0IV	168723	25046	- 2 4599	688
3.56	0.49	-0.05	0.45	0.75	F7V	170153	25122	72 839	695
1.83	-0.02	-0.10	0.00	-0.01	B9IV	169022	25100	-3412784	689
3.84	1.18	1.17	0.85	1.45	K2III	169414	25116	21 3411	690
3.50	-0.18	-0.63	-0.13	-0.34	R3III	169467	25154	-4612379	691
2.83	1.04	0.90	0.76	1.32	K2III	169916	25180	-2513149	692
4.70	0.06	0.05	0.08	0.13	A3V	170296	25220	-14 5071	696
5.38	0.96	0.76			K0III	170474	25234	- 2 4641	1480
4.63	1.01	0.77	0.69	1.19	G5III	170845	25313	-4213378	697
3.85	1.33	1.54	0.98	1.65	K3III	171443	25385	- 8 4638	1482
0.04	0.00	0.00	-0.04	-0.07	A0V	172167	25466	38 3238	699
4.00	1.14	1.02			K2III	171759	25522	-71 2353	698
4.89	1.12	0.87			G8II	173009	25610	- 8 4686	702
3.18	-0.10	-0.36	0.01	-0.10	B8III	173300	25661	-2713170	1487
4.22	1.10	0.81	0.79	1.36	G5II	173764	25730	- 4 4582	1489
4.35	0.13	0.08	0.10	0.11	A3V	173880	25734	18 3823	1491
5.48	0.13	0.00			A2V	173715	25748	-4312841	1490
5.35	0.05	0.04			A0	175286	25839	75 682	1494
4.21	-0.15	-0.88			B2III	173948	25823	-62 5983	704
4.65	1.19	1.05	0.90	1.54	K0III	175306	25905	59 1925	707
2.06	-0.21	-0.74	-0.11	-0.31	R2V	175191	25941	-2613595	706
4.81	1.16	1.10	0.85	1.41	K0III	176524	26024	71 915	714
3.50	1.18	1.15	0.80	1.38	K1III	175775	26019	-21 5201	710
3.25	-0.05	-0.09	-0.04	-0.04	R9III	176437	26086*	32 3286	713
4.02	1.08	1.04	0.76	1.28	K2III	176411	26091	14 3736	712
3.43	-0.10	-0.27	-0.03	-0.11	B8V	177756	26285	- 5 4876	717
3.31	1.19	1.14	0.88	1.48	K1III	177716	26291	-2713564	1496

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA		DECLINATION			PROPER MO- TION IN DEC	
		HRS	MIN	SEC	SEC/CENT	DEG	MIN	SEC	SEC/CENT		
719	TOT Lyr	19	6	26.619	-0.034	+36	3	42.45	-0.09		
718	ALP CRA	19	7	50.397	0.709	-37	56	35.98	-9.84		
720	PI SGR	19	8	20.176	-0.003	-21	3	47.00	-3.52		
1500	20 AQL	19	11	22.543	0.086	-7	58	50.96	-0.68		
723	DEL DRA	19	12	33.065	1.575	+67	37	9.67	9.39		
724	THE Lyr	19	15	31.997	-0.048	+38	5	24.81	0.40		
729	TAU DRA	19	16	1.173	-3.329	+73	18	40.99	11.03		
726	KAP Cyg	19	16	32.807	0.610	+53	19	25.31	12.54		
725	OME AQL	19	16	41.321	0.001	+11	33	4.17	1.62		
1502	RET1 SGR	19	20	54.858	0.063	-44	30	20.02	-1.84		
728	ALP SGR	19	22	13.477	0.264	-40	39	45.19	-12.06		
1503	31 AQL	19	23	49.463	4.912	+11	53	31.18	64.18		
730	DEL AQL	19	24	17.226	1.693	+3	3	57.11	8.40		
1508	ALP Vul	19	27	42.320	-0.925	+24	36	55.65	-10.36		
733	TOT Cyg	19	29	5.977	0.182	+51	40	41.21	13.03		
1509	36 AQL	19	29	24.460	0.122	-2	50	23.77	-0.63		
1510	A Cyg	19	30	52.693	-0.019	+34	24	4.23	-0.03		
1511	MU AQL	19	32	54.945	1.445	+7	19	37.02	-15.62		
735	TOT TEL	19	33	26.299	-0.133	-48	9	8.89	-3.61		
737	KAP AQL	19	35	35.952	0.004	-7	4	55.19	-0.42		
1512	54 SGR	19	39	20.876	0.475	-16	20	57.79	-4.52		
1513	RET SGE	19	39	58.184	0.062	+17	25	10.05	-3.26		
1514	55 SGR	19	41	8.739	0.437	-16	10	53.16	-1.00		
1515	10 Vul	19	42	42.958	0.081	+25	42	49.17	2.18		
740	15 Cyg	19	43	24.558	0.589	+37	17	44.17	3.56		
1517	56 SGR	19	44	57.742	-0.925	-19	49	11.96	-8.74		
741	GAM AQL	19	45	7.054	0.108	+10	33	13.86	0.15		
739	MU TEL	19	46	3.969	1.131	-56	25	18.87	-13.50		
743	DEL SGF	19	46	18.979	0.047	+18	28	26.93	1.03		
745	ALP AQL	19	49	36.678	3.620	+8	48	14.33	38.77		
1520	TOT SGR	19	53	36.482	0.127	-41	55	57.95	5.63		
749	RET AQL	19	54	7.990	0.298	+6	20	45.00	-47.94		
1522	61 SGR	19	56	35.354	0.096	-15	33	22.54	-9.80		
752	GAM SGE	19	57	41.304	0.460	+19	25	33.96	2.56		
748	FPS PAV	19	57	50.524	1.900	-72	58	33.93	-13.08		
751	THE1 SGR	19	58	10.565	0.061	-35	20	32.88	-2.44		
1523	15 Vul	20	0	6.650	0.439	+27	41	11.40	0.99		
753	62 SGR	20	1	11.025	0.289	-27	46	39.85	1.89		
1524	TAU AQL	20	2	57.916	0.089	+7	12	33.34	1.34		
755	XI TEL	20	5	33.200	-0.080	-52	57	3.46	1.03		
754	DEL PAV	20	6	23.104	19.939	-66	14	42.45	-113.42		
1525	28 Cyg	20	8	32.027	0.014	+36	46	5.73	1.59		
756	THE AQL	20	10	3.945	0.236	-0	53	37.06	0.73		
758	33 Cyg	20	12	50.365	0.729	+56	29	37.96	8.48		
1526	RHO AQL	20	13	9.922	0.401	+15	7	24.72	5.70		

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBR	NUMBER	NUMBER	NUMBER
5.26	-0.11	-0.54			B7IV	178475	26338	35 3485	719
4.10	0.04	0.07	0.04	0.04	A2	178253	26360	-3813350	718
2.89	0.36	0.19	0.46	0.81	F2III	178524	26386	-21 5275	720
5.34	0.13	-0.47			B3IV	179406	26461	- 8 4887	1500
3.07	1.00	0.79	0.70	1.21	G9III	180711	26520	37 339A	723
4.35	1.26	1.22	0.87	1.46	K0II	180809	26585	67 1129	724
4.45	1.25	1.45	0.90	1.47	K3III	181984	26638	73 857	729
3.77	0.96	0.73	0.63	0.11	K0III	181276	26621	53 2216	726
5.28	0.20	0.14			A3	180868	26609	11 3790	725
3.92	-0.09	-0.32			B8V	181454	26703	-4413277	1502
3.96	-0.11	-0.32			B8V	181869	26737	-4013245	728
5.15	0.76	0.42			G8IV	182572	26809	11 3833	1503
3.36	0.32	0.04	0.26	0.41	F0IV	182640	26816	2 3879	730
4.42	1.50	1.81	1.21	2.18	M0III	183439	26904	24 3759	1508
3.77	0.15	0.11	0.14	0.21	A5V	184006	26947	51 2605	733
5.02	1.75	2.03			M1III	183630	26936	- 3 4612	1509
4.73	-0.13	-0.67	-0.01	-0.16	B3IV	184171	26988	34 3590	1510
4.44	1.18	1.26	0.86	1.45	K3III	184406	27030	7 4132	1511
4.88	1.10	0.00			G9III	184127	27025	-4813161	735
4.96	-0.01	-0.87	0.10	0.06	R0.5III	184915	27107*	- 7 5006	737
5.31	1.14	1.06			K2III	185644	27214	-16 5399	1512
4.37	1.05	0.90	0.72	1.22	G8II	185958	27236	17 4048	1513
5.05	0.34	0.00			F0III	186005	27255	-16 5413	1514
5.48	0.93	0.67			G8III	186486	27305	25 3933	1515
4.90	0.96	0.69			G8III	186675	27328	37 3586	740
4.86	0.93	0.00			G8III	186648	27349	-20 5698	1517
2.72	1.53	1.68	1.07	1.82	K3II	186791	27354	10 4043	741
5.34	0.20	0.00			A9V	186543	27358	-56 9290	739
3.80	1.41	0.96	1.42	2.72	M2II	187076	27396	18 4240	743
0.77	0.22	0.08	0.14	0.27	A7IV	187642	27470*	8 4236	745
4.12	1.08	0.90			G8III	188114	27557	-4214549	1520
3.71	0.86	0.48	0.66	1.14	G2IV	188512	27587*	6 4357	749
5.02	0.05	0.07			A2IV	188899	27637	-15 5516	1522
3.48	1.56	1.93	1.20	2.12	K5III	189319	27672	19 4229	752
3.96	-0.03	-0.04			A0V	188228	27631	-73 2086	748
4.35	-0.15	-0.06			R3IV	189103	27670	-3513831	751
4.63	0.18	0.15	0.15	0.24	AM	189849	27753	27 3587	1523
4.50	1.63	1.77	1.87	3.43	M4III	189763	27763	-2816355	753
5.51	1.06	0.86			GK0	190327	27824	6 4416	1524
4.93	1.62	1.84			M2III	190421	27879	-53 9794	755
3.57	0.76	0.45			G5IV	190248	27886	-66 3474	754
4.94	-0.15	-0.74	0.02	-0.09	R2P	191610	27980	36 3907	1525
3.25	-0.06	-0.15	-0.07	-0.12	P9.5III	191692	28010	- 1 3911	756
4.28	0.12	0.09	0.13	0.19	A3V	192696	28108	56 2376	758
4.95	0.07	0.04	0.10	0.10	A2V	192425	28097	14 4227	1526

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
1527	ALP1 CAP	20	16	19.050	0.131	-12	35	0.37	0.18
1529	4 CAP	20	16	36.841	0.245	-21	53	6.93	-2.51
762	RET CAP	20	19	39.778	0.273	-14	51	29.61	0.29
763	KAP1 SGR	20	20	49.936	0.317	-42	7	35.53	-9.08
765	GAM CYG	20	21	21.914	0.014	+40	10	45.19	0.25
764	ALP PAV	20	23	45.460	0.189	-56	48	48.29	-8.49
1533	69 AQL	20	28	23.704	0.460	-	2	57 58.50	-1.70
1534	41 CYG	20	28	24.792	0.042	+30	17	15.77	0.15
1535	42 CYG	20	28	25.356	0.015	+36	22	26.25	0.20
767	THE CEP	20	29	10.773	0.600	+62	54	47.38	-1.04
768	FPS DEL	20	32	3.912	0.073	+11	13	15.17	-1.81
769	ALP IND	20	35	53.070	0.543	-47	22	35.02	6.97
1539	29 VUL	20	37	26.922	0.505	+21	6	58.34	0.80
774	ALP DEL	20	38	31.325	0.448	+15	49	35.59	-0.03
773	HPS CAP	20	38	41.033	-0.149	-18	13	26.92	-1.82
777	ALP CYG	20	40	36.721	0.008	+45	11	38.49	0.51
776	FTA IND	20	42	17.020	1.749	-52	0	28.75	-5.41
775	RET PAV	20	42	48.779	-0.611	-66	17	27.20	1.63
779	PSI CAP	20	44	40.574	-0.361	-25	21	29.50	-15.59
783	FTA CEP	20	44	48.146	1.238	+61	44	43.00	82.23
780	FPS CYG	20	45	14.295	2.844	+33	52	46.80	32.98
781	FPS AQR	20	46	22.608	0.219	-	9	35 4.32	-3.20
1543	3 AQR	20	46	28.237	-0.008	-	5	6 59.34	-3.76
1546	OME CAP	20	50	23.463	-0.045	-27	0	35.80	0.04
1547	MU AQR	20	51	21.560	0.276	-	9	4 27.35	-2.82
785	RET IND	20	52	56.698	0.314	-58	32	45.52	-2.20
786	32 VUL	20	53	32.137	-0.019	+27	57	56.40	0.19
788	NU CYG	20	56	16.589	0.073	+41	4	27.19	-1.15
789	11 AQR	20	59	17.980	0.302	-	4	49 25.63	-13.35
1550	GAM MIC	20	59	49.299	-0.001	-32	21	9.22	0.78
787	ALP OCT	21	1	51.726	0.360	-77	7	1.69	-36.35
792	XI CYG	21	4	3.344	0.047	+43	49	53.61	0.43
1552	THE CAP	21	4	35.937	0.577	-17	19	44.62	-5.61
791	A CAP	21	5	43.553	-0.168	-25	6	9.67	-4.06
794	NU AQR	21	8	17.221	0.625	-11	28	11.04	-1.34
1554	OMI PAV	21	11	6.951	0.903	-70	13	32.62	-2.71
797	RET CYG	21	11	54.764	-0.013	+30	7	40.41	-5.21
800	ALP EQU	21	14	37.398	0.379	+	5	8 52.40	-8.36
1558	SIG CYG	21	16	28.240	-0.019	+39	17	36.69	-0.04
801	FPS MIC	21	16	29.122	0.446	-32	16	25.53	-2.37
1559	HPS CYG	21	16	55.715	0.088	+34	47	43.71	-0.05
803	ALP CEP	21	18	0.379	2.155	+62	29	0.88	5.26
802	THE1 MIC	21	19	13.770	0.600	-40	54	43.21	-0.28
1561	TOT CAP	21	20	54.674	0.223	-16	56	15.40	0.61
804	1 PEG	21	20	58.496	0.744	+19	42	4.21	6.67

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER
4.24	1.07	0.79	0.79	1.32	G3IB	192876	28189	-12 5683	1527
5.85	1.00	0.00			K0III	192879	28195	-22 5384	1529
3.07	0.78	0.27	0.55	1.05	F8V	193495	28295	-15 5629	762
5.58	0.00	0.00			A0V	193571	28309	-4214836	763
2.21	0.67	0.53	0.50	0.84	F8IB	194093	28338	39 4159	765
1.92	-0.20	-0.71			R3IV	193924	28374	-57 9674	764
4.90	1.15	1.22			K2III	195135	28504	- 3 4918	1533
4.01	0.41	0.30	0.37	0.60	F5II	195295	28513	29 4057	1534
5.88	0.52	0.10			A1IB	195324	28515	35 4141	1535
4.21	0.20	0.15	0.18	0.23	AM	195725	28541	62 1821	767
4.03	-0.13	-0.48	-0.02	-0.13	R6III	195810	28593	10 4321	768
3.11	1.00	0.80			K0III	196171	28682	-4713477	769
4.80	-0.02	-0.11	0.02	-0.02	A0V	196724	28740	20 4658	1539
3.77	-0.06	-0.22	0.03	-0.01	R9V	196867	28780*	15 4222	774
5.10	1.63	2.01			M2III	196777	28777	-18 5738	773
1.25	0.09	-0.23	0.12	0.22	A2IA	197345	28846	44 3541	777
4.50	0.28	0.06			A7	197157	28860	-5211752	776
3.42	0.16	0.09			A5IV	197051	28862	-66 3501	775
4.13	0.43	0.00	0.36	0.56	F5V	197692	28929	-2315018	779
3.43	0.90	0.62	0.67	1.16	K0IV	198149	28962	61 2050	783
2.46	1.04	0.87	0.72	1.29	K0III	197989	28959	33 4018	780
3.77	0.01	0.04	0.07	0.07	A1V	198001	28978*	-10 5506	781
4.41	1.66	1.91	1.47	2.78	M3III	198026	28979	- 5 5378	1543
4.11	1.66	1.93	1.25	2.19	K5III	198542	29079	-2715082	1546
4.72	0.33	0.08	0.26	0.41	AM	198743	29109	- 9 5598	1547
3.64	1.25	1.23			K0III	198700	29133	-58 7788	785
5.00	1.49	1.80			K4III	199169	29178	27 3911	786
3.93	0.02	0.00	0.06	0.07	A0V	199629	29251	40 4364	788
6.20	0.63	0.22			G1V	199960		- 5 5433	789
4.66	0.89	0.54			G4III	199951	29331	-3216353	1550
5.14	0.49	0.11			F4III	199532	29343	-77 1474	787
3.72	1.66	1.78	1.21	2.11	K5IB	200905	29459	43 3800	792
4.06	-0.01	0.01	0.01	-0.01	A0V	200761	29460	-17 6174	1552
4.50	1.60	1.96			M1III	200914	29490	-2515235	791
4.51	0.94	0.69	0.69	1.15	G8III	201381	29571	-11 5538	794
5.01	1.58	1.55			M2III	201371	29606	-70 2835	1554
3.19	1.00	0.76	0.69	1.18	G8II	202109	29661	29 4348	797
3.91	0.53	0.28	0.44	0.79	G0III	202447	29735	4 4635	800
4.23	0.11	-0.41	0.13	0.16	B9IAB	202850	29786	38 4431	1558
4.70	0.06	0.01			AP	202627	29774	-3216498	801
4.46	-0.12	-0.81	0.05	-0.03	R2VE	202904	29802	34 4371	1559
2.44	0.23	0.11	0.21	0.21	A7V	203280	29848	61 2111	803
4.81	0.02	-0.08	0.09	0.13	A0VP	203006	29854	-4114475	802
4.27	0.90	0.57	0.62	1.10	G8III	203387	29903	-17 6245	1561
4.08	1.11	1.05	0.78	1.33	K1IV	203504	29914	19 4691	804

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA		DECLINATION			PROPER MO- TION IN DEC	
		HRS	MIN	SEC	SEC/CENT	DEG	MIN	SEC	SEC/CENT		
1562	18 AQR	21	22	52.828	0.603	-12	58	54.89		0.95	
805	GAM PAV	21	24	28.691	1.485	-65	28	33.93		79.74	
1563	GAM IND	21	24	33.288	0.133	-54	45	54.41		4.33	
806	7ET CAP	21	25	17.914	0.015	-22	30	57.90		2.67	
807	71 CYG	21	28	33.663	0.413	+46	26	3.44		10.76	
808	RET AQR	21	30	17.723	0.128	-	5	40 38.96		-0.54	
1568	RHO CYG	21	33	4.526	-0.250	+45	29	6.89		-9.11	
811	74 CYG	21	35	59.068	-0.047	+40	18	18.83		1.66	
1569	XI AQR	21	36	28.450	0.762	-	7	57 45.25		-2.24	
812	GAM CAP	21	38	45.726	1.312	-16	46	17.34		-2.15	
810	MU OCT	21	38	51.973	1.795	-77	29	52.99		-23.89	
817	11 CEP	21	41	34.439	2.389	+71	12	3.11		10.52	
814	TOT PSA	21	43	31.225	0.286	-33	8	9.81		-9.00	
1572	MU CEP	21	44	45.280	-0.054	+61	0	35.00		0.09	
818	I AM CAP	21	45	14.599	0.185	-11	28	38.37		-0.67	
821	PI2 CYG	21	45	54.228	0.019	+49	11	53.22		0.29	
1574	11 PEG	21	46	0.904	0.067	+	2	34 28.38		0.30	
1575	14 PEG	21	48	46.832	0.131	+30	3	42.94		-2.35	
820	OMI IND	21	48	46.865	-0.412	-69	44	32.15		-0.38	
823	16 PEG	21	51	58.094	0.062	+25	48	42.08		0.23	
1577	MU CAP	21	51	59.287	2.123	-13	39	55.59		1.39	
822	GAM GRU	21	52	28.764	0.870	-37	28	42.49		-1.63	
825	EPS IND	22	1	32.074	48.204	-56	53	8.07		-254.49	
830	20 CEP	22	4	16.579	0.200	+62	40	5.95		6.35	
827	ALP AQR	22	4	33.034	0.111	-	0	26 13.08		-0.44	
1581	I AM GRU	22	4	40.370	-0.166	-39	39	35.21		-11.66	
828	TOT AQR	22	5	8.486	0.266	-13	59	12.14		-5.32	
831	TOT PEG	22	5	53.486	2.197	+25	13	38.59		2.81	
829	ALP GRU	22	6	43.606	1.281	-47	4	40.57		-14.85	
832	MU PSA	22	6	59.166	0.614	-33	6	22.95		-3.28	
833	27 PEG	22	8	9.654	-0.480	+33	3	16.79		-6.24	
835	PI PEG	22	8	55.107	-0.124	+33	3	35.98		-1.65	
834	THE PEG	22	8	59.275	1.837	+	6	4 45.41		3.25	
837	24 CEP	22	9	20.877	0.674	+72	13	22.52		1.03	
836	7ET CEP	22	10	1.108	0.162	+58	4	57.46		0.85	
838	I AM PSA	22	12	57.281	0.206	-27	53	11.57		0.15	
840	THE AQR	22	15	34.036	0.790	-	7	54 12.02		-1.90	
841	ALP TUC	22	16	52.255	-0.791	-60	22	47.71		-3.88	
839	EPS OCT	22	17	25.240	1.969	-80	33	37.04		-3.90	
1584	47 AQR	22	20	16.394	-0.059	-21	43	8.66		-8.25	
843	31 PEG	22	20	20.107	0.061	+12	5	1.90		1.18	
842	GAM AQR	22	20	24.960	0.859	-	1	30 31.44		1.24	
844	RET LAC	22	22	36.731	-0.180	+52	6	30.48		-18.32	
1585	PI AQR	22	24	3.028	0.116	+	1	15 18.46		0.53	
845	MU GRU	22	27	15.030	0.313	-39	15	13.91		-16.39	

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL	HD	GC	DM	FK4
V	B-V	U-B	V-R	V-I	TYPE	NUMBER	NUMBER	NUMBER	NUMBER
5.48	0.30	0.00			F0IV	203705	29957	-13 5923	1562
4.23	0.50	-0.07			F8V	203608	29979	-65 3918	805
6.12	0.34	0.04			F0III	203760	29994	-55 9586	1563
3.74	1.00	0.59	0.64	1.06	G4IB	204075	30020	-2215388	806
5.23	0.97	0.80			K0III	204771	30108	45 3558	807
2.88	0.83	0.54	0.61	1.02	G0IB	204867	30137	- 6 5570	808
4.02	0.89	0.56	0.68	1.18	G8III	205435	30207	44 3865	1568
5.04	0.18	0.10			A5	205835	30263	39 4612	811
4.68	0.18	0.12	0.17	0.27	A7V	205767	30268	- 8 5701	1569
3.67	0.32	0.19	0.23	0.36	F0P	206088	30320	-17 6340	812
3.78	1.00	0.90			K0III	205478	30289	-77 1510	810
4.55	1.11	1.10	0.84	1.38	K0III	206952	30415	70 1193	817
4.33	-0.06	-0.10	-0.01	-0.04	A0VP	206742	30439	-3315734	814
4.28	0.51	0.13	0.51	0.94	A2IA	207260	30483	60 2288	1572
5.99	0.00	-0.05			A2V	207052	30481	-12 6087	818
4.23	-0.13	-0.71	-0.04	-0.17	R3III	207330	30512	48 3504	821
5.63	0.03	0.04			A0	207203	30501	2 4414	1574
5.07	-0.02	0.00			A0V	207650	30565	29 4525	1575
5.51	1.38	1.63			K5III	207241	30541	-70 2873	820
5.06	-0.18	-0.70			R3VE	208057	30635	25 4635	823
5.07	0.38	0.00			F0V	207958	30631	-14 6149	1577
3.00	-0.12	-0.43	-0.05	-0.11	R8III	207971	30640	-3714536	822
4.67	1.06	1.00			K5V	209100	30817	-5710015	825
5.27	1.41	1.78			K4III	209960	30904	62 2029	830
2.93	0.98	0.72	0.66	1.13	G2IB	209750	30896	- 1 4246	827
4.47	1.37	1.65	1.00	1.78	M0III	209688	30892	-4014639	1581
4.27	-0.07	-0.29	-0.04	-0.13	R8V	209819	30914	-14 6209	828
3.76	0.44	-0.03	0.39	0.64	F5V	210027	30932	24 4533	831
1.74	-0.15	-0.46	-0.08	-0.14	B5V	209952	30942	-4714063	829
4.49	0.06	0.05	0.07	0.12	A2V	210049	30954	-3315922	832
5.58	1.00	0.77			G66	210354	30995	32 4349	833
4.30	0.45	0.18	0.39	0.66	F5II	210459	31016	32 4352	835
3.52	0.09	0.08	0.05	0.09	A2V	210418	31013	5 4961	834
4.78	0.92	0.61	0.69	1.17	G8III	210807	31037	71 1111	837
3.35	1.58	1.73	1.08	1.86	K1IB	210745	31044	57 2475	836
5.43	-0.13	-0.47			R8III	210934	31095	-2817653	838
4.15	0.98	0.81	0.73	1.20	G8IV	211391	31152	- 8 5845	840
2.85	1.39	1.47			K3III	211416	31183	-60 7561	841
5.09	1.47	1.09			M6III	210967	31166	-81 995	839
5.13	1.07	0.00			K2III	212010	31247	-22 5897	1584
5.00	-0.16	-0.83	-0.04	-0.20	R2VE	212076	31255	11 4784	843
3.85	-0.05	-0.11	0.04	0.00	A0V	212061	31257	- 2 5741	842
4.42	1.02	0.78	0.76	1.32	G9III	212496	31310	81 3358	844
4.66	-0.04	-0.97	0.15	0.15	R1VE	212571	31328	0 4872	1585
5.46	0.96	0.00			G9III	212953	31387	-3914723	845

TABLE 1 CONTINUED

FK4 NUMBFR	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
846	DEL1 GRU	22	27	50.411	0.263	-43	37	7.66	-0.26
1588	36 PEG	22	27	56.044	0.378	+ 9	0	21.71	-1.77
1590	38 PEG	22	28	55.769	0.274	+32	26	57.88	-1.01
1591	SIG AGR	22	29	22.623	0.002	-10	48	4.55	-2.73
1592	BET PSA	22	30	8.654	0.532	-32	28	10.48	-1.14
848	ALP LAC	22	30	17.899	1.403	+50	9	31.76	2.30
849	UPS AGR	22	33	22.943	1.580	-20	49	53.84	-14.14
850	FTA AGR	22	34	7.338	0.593	- 0	14	29.73	-5.10
851	31 CEP	22	35	10.488	3.998	+73	31	6.68	3.04
1595	KAP AGR	22	36	30.777	-0.467	- 4	21	8.03	-11.45
853	30 CEP	22	37	47.667	-0.072	+63	27	34.06	-2.04
852	10 LAC	22	38	10.835	-0.003	+38	55	30.19	-0.05
854	FPS PSA	22	39	19.825	0.224	-27	10	9.07	0.47
855	7ET PEG	22	40	15.807	0.540	+10	42	20.54	-0.76
857	FTA PEG	22	41	52.439	0.103	+30	5	43.51	-2.08
858	13 LAC	22	43	1.010	-0.084	+41	41	34.80	0.76
859	LAM PEG	22	45	22.353	0.422	+23	26	20.50	-0.58
1597	68 AGR	22	46	15.847	-0.718	-19	44	20.01	-19.84
860	FPS GRU	22	47	6.726	1.167	-51	26	36.51	-6.36
861	TAU AGR	22	48	19.284	-0.097	-13	43	10.72	-3.31
863	TOT CEP	22	48	49.231	-1.088	+66	4	26.53	-11.91
862	MU PEG	22	48	50.526	1.079	+24	28	34.58	-3.64
864	LAM AGR	22	51	21.712	0.048	- 7	42	27.69	3.95
865	RHO IND	22	53	0.621	-0.766	-70	12	8.82	7.30
866	DEL AGR	22	53	22.624	-0.294	-15	56	55.72	-2.18
867	ALP PSA	22	56	19.635	2.582	-29	44	59.32	-16.06
868	7ET GRU	22	59	28.234	-0.690	-52	52	59.47	-0.77
1601	PI PSA	23	2	10.282	0.579	-34	52	46.31	8.55
1602	BET PSC	23	2	39.246	0.071	+ 3	41	26.11	-0.43
871	ALP PEG	23	3	33.790	0.433	+15	4	33.12	-3.82
1603	55 PEG	23	5	47.615	0.064	+ 9	16	46.46	-0.98
873	88 AGR	23	8	10.079	0.381	-21	18	10.55	3.60
1605	TOT GRU	23	9	0.328	1.298	-45	22	37.04	-2.09
1606	59 PEG	23	10	31.382	-0.051	+ 8	35	22.44	0.00
1607	PHI AGR	23	13	4.738	0.254	- 6	10	43.03	-19.22
1608	PSII AGR	23	14	38.036	2.492	- 9	13	7.43	-1.23
878	GAM PSC	23	15	55.199	5.073	+ 3	9	3.40	2.24
877	GAM TUC	23	16	2.260	-0.322	-58	22	2.94	8.94
879	GAM SCL	23	17	31.842	0.173	-32	39	46.64	-6.37
880	TAU PEG	23	19	26.774	0.239	+23	36	31.86	-0.17
1612	98 AGR	23	21	42.638	-0.873	-20	13	54.29	-9.03
1613	67 PEG	23	23	40.085	0.108	+32	15	10.29	0.44
882	4 CAS	23	23	45.789	0.127	+62	9	3.54	-0.62
881	UPS PEG	23	24	10.716	1.404	+23	16	18.82	4.32
883	OMI GRU	23	25	16.330	0.365	-52	51	16.76	13.14

TABLE 1 CONTINUED

MAGNITUDES AND COLORS					SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM NUMBER	FK4 NUMBER
V	B-V	U-B	V-R	V-I					
3.96	1.03	0.81	0.73	1.37	G2	213009	31400	-4414931	846
5.57	1.56	1.91			K5	213119	31408	8 4874	1588
5.51	-0.10	-0.25			R9V	213323	31430	31 4708	1590
4.83	-0.06	-0.09	-0.01	-0.05	A0V	213320	31440	-11 5650	1591
4.28	0.01	0.01	0.02	0.04	A0V	21339A	31459	-3217126	1592
3.75	0.02	0.01	0.02	0.00	A2V	21355A	31471	49 3875	848
5.20	0.44	0.00			F3V	213845	31516	-21 6251	849
4.02	-0.09	-0.25	-0.05	-0.12	R8V	21399A	31534	- 0 4384	850
5.07	0.38	0.00			F4III	214470	31567	72 1049	851
5.03	1.14	1.16			K2III	214376	31581	- 4 5716	1595
5.21	0.15	0.00			A2	214734	31620	62 2102	853
4.88	-0.20	-1.04	-0.08	-0.29	O9V	214680	31626*	38 4826	852
4.17	-0.12	-0.38	-0.05	-0.15	RV	21474A	31646	-2716010	854
3.39	-0.09	-0.27	-0.03	-0.10	R8V	214923	31664	10 4797	855
2.93	0.85	0.55	0.64	1.11	G2II	215182	31706	29 4741	857
5.08	0.97	0.00			K0III	215373	31732	41 4594	858
3.96	1.06	0.91	0.75	1.27	G8III	215665	31776	22 4709	859
5.26	0.94	0.00			G7III	215721	31794	-20 6486	1597
3.48	0.08	0.08			A2V	215789	31813	-5113389	860
4.01	1.57	1.95	1.18	2.13	M0III	216032	31836	-14 6354	861
3.50	1.05	0.90	0.83	1.34	K1III	21622A	31857	65 1814	863
3.49	0.93	0.67	0.68	1.15	G8III	216131	31851	23 4615	862
3.76	1.64	1.73	1.40	2.60	M2III	216386	31903	- 8 5968	864
6.04	0.66	0.23			G5V	216437	31926	-70 2971	865
3.27	0.06	0.08	0.09	0.13	A3V	216627	31943	-16 6173	866
1.15	0.09	0.07	0.11	0.13	A3V	216956	32000	-3019370	867
4.11	0.98	0.71			G5III	217364	32061	-5310382	868
5.11	0.29	0.00			F0IV	217792	32122	-3515630	1601
4.52	-0.12	-0.49	-0.02	-0.15	B5VPE	217891	32134	3 4818	1602
2.49	-0.05	-0.06	0.01	-0.01	R9V	218045	32149*	14 4926	871
4.52	1.57	1.87	1.26	2.28	M2III	218329	32196	8 4997	1603
3.66	1.22	1.23	0.84	1.44	K0III	218594	32246	-21 6368	873
3.89	1.02	0.87	0.75	1.31	K0III	218670	32270	-4514947	1605
5.15	0.13	0.07			A0V	21891A	32302	7 4991	1606
4.22	1.56	1.90	1.28	2.37	K0III	219215	32346	- 6 6170	1607
4.22	1.10	1.02	0.79	1.35	K0III	219449	32374	- 9 6156	1608
3.69	0.92	0.57	0.71	1.23	G8III	219615	32415	2 4648	878
3.98	0.40	-0.04			F0III	219571	32413	-58 8062	877
4.41	1.13	1.07	0.84	1.47	G8III	219784	32450	-3316476	879
4.58	0.18	0.13	0.20	0.29	A5IV	220061	32503	22 4810	880
3.96	1.10	0.96	0.82	1.42	K0III	220321	32540	-20 6587	1612
5.57	-0.10	-0.26			R9III	220599	32577	31 4904	1613
4.97	1.68	2.07			M1III	220652	32582	61 2444	882
4.41	0.61	0.16	0.54	0.86	F8IV	220657	32585	22 4833	881
5.52	0.40	0.00			F3IV	220729	32603	-5310461	883

TABLE 1 CONTINUED

FK4 NUMBER	NAME	RIGHT ASCENSION			PROPER MO- TION IN RA SEC/CENT	DECLINATION			PROPER MO- TION IN DEC SEC/CENT
		HRS	MIN	SEC		DEG	MIN	SEC	
884	KAP PSC	23	25	42.050	0.572	+	1	7 26.53	-9.22
1614	THE PSC	23	26	44.948	-0.821	+	6	14 49.08	-4.10
885	70 PEG	23	27	56.333	0.437	+	12	37 41.09	3.44
886	RET SCL	23	31	41.218	0.727	-	37	57 4.90	2.05
1616	15 AND	23	33	26.784	-0.154	+	40	6 14.70	-3.98
891	IOT AND	23	36	57.234	0.257	+	43	8 6.61	0.37
893	GAM CEP	23	38	20.872	-2.008	+	77	29 54.42	15.55
892	IOT PSC	23	38	42.852	2.512	+	5	29 46.05	-43.22
1619	KAP AND	23	39	13.220	0.753	+	44	12 3.57	-1.49
1618	MU SCL	23	39	22.702	-0.727	-	32	12 21.46	-5.03
1620	LAM PSC	23	40	49.239	-0.868	+	1	38 52.62	-14.69
1621	106 AQR	23	42	57.412	0.186	-	18	24 36.73	0.19
1622	PSI AND	23	44	50.311	0.088	+	46	17 13.38	-0.04
1623	20 PSC	23	46	42.440	0.617	-	2	53 42.23	1.02
898	PHI PEG	23	51	15.843	-0.032	+	18	59 13.25	-3.04
1629	PSI PEG	23	56	31.934	-0.239	+	25	0 29.02	-2.66
902	OME PSC	23	58	4.625	1.019	+	6	43 49.61	-10.94
903	EPS TUC	23	58	40.793	0.907	-	65	42 38.51	-1.99

TABLE 1 CONTINUED

V	MAGNITUDES AND COLORS				SPECTRAL TYPE	HD NUMBER	GC NUMBER	DM NUMBER	FK4 NUMBER
	B-V	U-B	V-R	V-I					
4.93	0.03	-0.02	0.08	0.04	A2P	220825	32620	0 4998	884
4.27	1.07	1.01	0.80	1.33	K1III	220954	32647	5 5173	1614
4.54	0.94	0.73	0.74	1.19	G8III	221115	32667	11 5009	885
4.37	-0.10	-0.34	0.00	-0.07	AP	221507	32744	-3815527	886
5.60	0.08	0.09			A2III	221756	32780	39 5114	1616
4.27	-0.10	-0.32	0.02	-0.07	R8V	222173	32850	42 4720	891
3.22	1.03	0.93	0.77	0.28	K1IV	222404	32875	76 928	893
4.13	0.51	0.00	0.43	0.72	F7V	222368	32879*	4 5035	892
4.14	-0.08	-0.25	0.02	-0.06	R8V	222439	32886	43 4522	1619
5.30	0.97	0.00			K0III	222433	32888	-3217621	1618
4.50	0.20	0.09	0.19	0.29	A7V	222603	32917	0 5037	1620
5.27	-0.09	-0.28			R8V	222847	32958	-19 6500	1621
4.95	1.12	0.82			G5IB	223047	32988	45 4321	1622
5.48	0.94	0.70			G8III	223252	33029	- 3 5707	1623
5.05	1.60	0.00			M2	223768	33119	18 5231	898
4.64	1.60	1.63	1.46	2.80	M3III	224427	33230	24 4865	1629
4.02	0.41	0.05	0.38	0.62	F4IV	224617	33262	6 5227	902
4.49	-0.09	-0.24			R8V	224686	33280	-66 3819	903

REFERENCES

1. W. Fricke and A. Kopff, Vierter Fundamental Katalog (Veröffentlichungen des Astronomischen Rechen-Instituts, Heidelberg, Germany, No. 10, 1963).
2. B. Boss, General Catalogue of 33, 342 Stars for the Epoch 1950 (Carnegie Institution of Washington, Washington, D.C., 1963).
3. H. L. Johnson, "Photometric Systems," in Basic Astronomical Data, K. Aa. Strand, Ed. (University of Chicago Press, Chicago, 1963), p. 204.
4. V. M. Blanco, S. Demers, G. G. Douglass, and M. P. Fitzgerald, USN Observatory 21 (1968).
5. F. Ochsenbein, Astronomy Astrophysics Supplement 15, 215 (1974).
6. B. Iriarte, M. L. Johnson, R. I. Mitchell, and W. K. Wisniewski, Sky and Telescope 30, 1 (1965).

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