The Parkes 2700 MHz survey catalogues for the +/-4 declination zone and for selected regions

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THE PARKES 2700 MHz SURVEY

CATALOGUES FOR THE ±4° DECLINATION ZONE AND FOR THE SELECTED REGIONS

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Abstract

Two catalogues of extragalactic radio sources obtained from sky surveys at 2700 MHz are presented. The first catalogue comprises 500 radio sources in the declination zone +4° to −4°, all of which are at least 10° from the galactic plane. Of these, 130 sources do not appear in previously published catalogues. The catalogue is complete to a limiting flux density of 0.35 f.u. at 2700 MHz over an area of 0.73 sr. The second catalogue is of 300 sources, obtained from relatively deep surveys of six selected areas each approximately 6°.5 square, and is complete to a limiting flux density of 0.10 f.u. at 2700 MHz, corresponding to a source density of 2500 sr^{-1}. Source positions in both catalogues are accurate to approximately 15″ arc in each coordinate, and flux densities are accurate to approximately 0.015 f.u. or 2.5%, whichever is greater. The results of optical identifications from the Palomar Sky Survey prints and additional Schmidt plates taken by J. G. Bolton are given, together with source counts from the two catalogues.

I. INTRODUCTION

We present the results of the first two parts of a 2700 MHz survey for extragalactic radio sources which is being carried out with the 210 ft reflector of the Australian National Radio Astronomy Observatory at Parkes, N.S.W. The first part consists of a survey of the declination zone +4° to −4°, excluding areas within 10° of the galactic plane. The area covered is about 0.77 sr; over 0.73 sr the catalogue is complete to a limiting flux density at 2700 MHz of 0.35 f.u.§, corresponding to a source density of approximately 450 sr^{-1}. The second part includes surveys of six selected regions, each 6°.5 square and coincident with the area covered by a single plate taken with the 48 in. Schmidt telescope of the Palomar Observatory. Each of these selected-region surveys is complete to a limiting flux density at 2700 MHz of 0.10 f.u., corresponding to a source density of approximately 2500 sr^{-1}.

The primary objective of the Parkes 2700 MHz survey is to provide comprehensive and reliable catalogues of extragalactic sources at this frequency. These will complement the extensive catalogues at present in existence which have been compiled from surveys at lower frequencies. The results of the 2700 MHz survey will be of particular interest in the following investigations.

(1) The determination of the manner in which the identification content of a radio source catalogue depends on survey frequency.

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§ 1 f.u. = 10^{-26} W m^{-2} Hz^{-1}.

(2) The determination of the manner in which the spectral content of a source catalogue changes as survey frequency is increased.
(3) The investigation of sources which show spectral maxima at centimetre wavelengths and which may exhibit time variations in the radio spectrum; the determination of the relative numbers of such sources.
(4) The derivation of a number–flux density relation for radio sources at a relatively high frequency and the comparison with relations derived from the lower frequency surveys.

In this paper the accuracy of the positions and flux densities given in the catalogues is discussed and comparisons are made with other published data. The positions of all sources have r.m.s. errors of approximately 15″ arc in both right ascension and declination. Previous work at Parkes has shown that this accuracy is adequate for making optical identifications. Full details of the identification program have been published (Bolton and Wall 1970; Merkelijn and Wall 1970), and the results are included in the present catalogues. The 2700 MHz flux densities are accurate to approximately 0.015 f.u. for the weaker sources and 2.5% for the stronger sources.

Radio spectra in the frequency range 178–5000 MHz have been derived for most sources in the ±4° declination zone catalogue from previously published data combined with additional observations at Parkes. These observations and a discussion of the spectra will be reported separately.

The survey is being continued, and a further 0.9 sr has been covered to date. The results from additional areas will be reported as they are completed.

II. EQUIPMENT

At the frequency of 2700 MHz the 210 ft reflector has an aperture efficiency of about 50% (Minnett and Yabsley 1966; Yabsley, personal communication). For the present survey the telescope was fitted with a new 2700 MHz receiver (Batchelor, Brooks, and Cooper 1968). The receiver is of the dual-channel correlation type, each channel having two stages of degenerate parametric amplification of 400 MHz bandwidth, followed by a mixer and zero-frequency i.f. system of 200 MHz bandwidth. The receiver has a hybrid junction at the input and for the survey a dual-beam feed system was employed, the on-axis beam feed being of the hybrid mode type (Minnett and Thomas 1966). The feed system produces an on-axis beam 7′.9 arc to half-power points and a slightly broader secondary beam displaced 18′.5 arc off axis. In this mode the receiver output is essentially the difference between the signals at the on-axis and off-axis feeds, and sources in the two beams produce output deflections in the opposite sense. The system noise temperature of 100 K and overall bandwidth of 200 MHz result in r.m.s. output deflections of 0.01 K (0.02 f.u.) for a 2 s output time constant, and enable sources of 0.05 f.u. to be reliably detected with a single scan.

The receiver may also be operated in a single-beam mode with a cooled reference load, but the dual-beam mode is superior in that the system noise temperature is smallest and the effects of variable atmospheric extinction are minimized. However, errors in measuring intensities and coordinates due to confusion are greater by a factor of $\sqrt{2}$.

A 10 in. strip chart recorder with bandwidth of 30 Hz was used for recording the receiver output. The chart was run at 80 mm min^{-1} for all the present observations.

III. OBSERVATIONS AND REDUCTIONS

(*a*) *The +4° to −4° Declination Zone*

The first part of the survey consisted of covering most of the zone between declinations +4° and −4° with a series of scans in declination spaced by 6′ arc. Regions of low galactic latitudes between R.A. 06^h00^m and 07^h21^m and R.A. 18^h00^m and 19^h40^m were omitted. The total area covered was 2520 square degrees or 0.768 sr. Observing time was halved by using the receiver in the dual-beam configuration, a control system being used to keep the feed oriented so that the off-axis beam effected a scan displaced 18′.5 arc from that of the main beam. The scan rate was 2° min^{-1} with an effective output time constant of about 1 s.

The reduction procedure consisted of estimating and listing the positions of all sources which appeared from the scans to be stronger than 0.25 f.u. Sources in the list were re-observed in the position–flux density observations described below. About 25 sources were listed in each hour of right ascension.

TABLE 1

Centres of Selected Regions

48 in. Schmidt Plate Number	1950.0 Coordinates R.A.	Dec.
PS 1112	$00^h\ 04^m\ 51^s$	+00° 32′
PS 891	00 52 55	+00 31
PS 1114	02 32 31	+00 25
PS 1777	12 04 50	−00 31
PS 1778	13 40 48	−00 29
PS 896	22 03 26	−18 50

(*b*) *Selected Regions*

In the period 1966–8, J. G. Bolton took a series of two-colour (blue and ultra-violet) plates with the 48 in. Schmidt telescope of the Palomar Observatory. In the second part of the Parkes 2700 MHz survey six of these plates were selected as being free from galactic absorption and the corresponding areas (each approximately 6°.5 × 6°.5) were scanned in surveys designed to be complete to a flux density of 0.10 f.u. The coordinates of the centres of each area are given in Table 1. The total area of the six selected regions is 247 square degrees or 0.0753 sr.

The survey technique was to cover each area with a grid of scans spaced by 4′ arc in right ascension and declination. The receiver was again used in the dual-beam mode with feed rotation control as described above. A scan rate of 1° min^{-1} was used with an effective output time constant of about 2 s. Calibration was carried out at half-hour intervals by the injection of 1 K of noise power at the receiver input.

The reduction procedure consisted of listing positions and amplitudes of all source-like deflections on the scans and replotting these on charts of the six selected areas. The coordinates of all sources which appeared to have flux densities greater than 0.06 f.u. were then tabulated for re-observation to determine accurate positions and flux densities. These lists comprised some 70 sources for each region, about 50 of which appear in the final catalogue.

(c) *Source Position–Flux Density Measurements*

All observations at 2700 MHz described herein, both the surveys and the subsequent measurements of positions and flux densities, were carried out in 11 observing sessions between June 1967 and June 1969. Generally both types of observation were performed in each observing session. This procedure enabled preliminary results of the source counts to be obtained (Shimmins, Bolton, and Wall 1968) and the identification program to be carried out concurrently. The dates of each observing session together with the types of observation carried out are given in Table 2.

TABLE 2

2700 MHz Observing Sessions

SS = survey for selected regions, SZ = survey for declination zone $+4^\circ$ to -4°, P/F = source positions and flux density measurements

Observing Session	Dates	Type of Observation	Approx. No. of P/F	σ_{run}* (%)
1	1967.48, June 23–28	SS, P/F	70	1.84
2	1967.63, Aug. 17–21	SS, P/F	60	1.70
3	1967.67, Aug. 29–Sept. 8	SS, SZ, P/F	200	1.77
4	1967.80, Oct. 18–21	SZ	–	3.0
5	1967.88, Nov. 14–23	SZ	225	1.52
6	1968.04, Jan. 16–19	SZ, P/F	25	2.10
7	1968.24, Mar. 28–Apr. 1	SS, SZ, P/F	105	1.75
8	1968.28, Apr. 9–14	SZ, P/F	420	1.47
9	1968.92, Nov. 30–Dec. 5	P/F	240	1.40
10	1969.06, Jan. 20 and 26	SZ, P/F	20	1.70
11	1969.43, June 7–9	P/F	150	1.96

* R.M.S. error for flux density calibration.

The source positions and flux densities were obtained by scans through the source coordinates listed from the survey records. The number of scans in each coordinate generally was sufficient to ensure that errors due to noise were less than those of calibration in measuring the positions, and less than those due to confusion or calibration in measuring the flux densities. For the stronger sources (flux densities > 0.5 f.u.) at least two scans were made in each coordinate; weaker sources were scanned up to six times in each coordinate. A scan rate of $0^\circ.5$ min^{-1} was used with an effective output time constant of about 2 s. Markers were added to the strip chart record to indicate the apparent position of the main beam of the telescope during the scans. A calibration signal of 1 K noise power was injected at least once during the observation of every source. Most sources were observed within one and a half hours of transit.

In observing sessions 1 to 8 (Table 2) each source was observed at only one (linear) polarization, the position angle of the feed being chosen so that the off-axis beam did not encounter the source during scans in either coordinate. Where scans through a source indicated the presence of a confusing source in the off-axis beam, the position angle was changed. For the position–flux density observations of sources in the selected areas, the plotted charts of the regions were consulted to choose orientations of the feed for minimal confusion effects. In sessions 9 to 11 each source was measured at orthogonal polarizations, again chosen so that the off-axis beam did not encounter the source during scans in either coordinate.

Table 3 consists of accurately measured positions of well-established optical identifications which were used in position calibrations. All QSO's in the list of calibrators have been confirmed by photometry or spectroscopy. The radio galaxies are generally fainter than m_{pg} = 16 in order to minimize any small differences between optical positions and centroids of radio emission. By observing sources from the calibration grid during a positioning program, the systematic pointing corrections can be established. In the present program, observations were made such that every program source could be referred to one or more calibrator sources less than 15° away and observed within 1 hr.

For each source, apparent coordinates were determined from the records by measuring the positions of the centroids of all scans. These were averaged for each coordinate; taking forward–reverse pairs of scans removed the effect of the output time constant. Pointing corrections were established from the calibrator sources by determining differences between the apparent coordinates and those listed for the optical object precessed to the epoch of observation. The true position for each program source was then determined from the apparent position with the corrections found from the calibrator to which it could be referred. If the source could be referred to two calibrators, the pointing corrections were averaged. Corrected positions were precessed to epoch 1950.0.

The positions of the catalogue sources as obtained in this program are given for the +4° to −4° declination zone in Table 4, and for the selected regions in Table 5.

The peak flux density was obtained for each source by measuring the amplitudes of the smoothed scans. Corrections for telescope setting errors were applied to the computed averages of the right ascension and declination scan amplitudes. These corrections were determined from the known shape of the telescope beam and from the differences between the apparent (measured) coordinates and the coordinates to which the telescope was set for either scan series. The average of the two estimates of scan amplitude thus obtained was corrected (by ~ 1%) for the well-established changes in atmospheric attenuation and dish efficiency with zenith angle. The peak flux density was finally obtained by relating the corrected source amplitude to the deflection produced by the (nominal) 1 K noise calibration signal, which was recorded at least once during the measurement of each source.

The precise value of the noise calibration signal in flux units was determined for each observing session as follows. The flux density scale adopted is based on the assumption of S_{2700} = 23.5 f.u. for the peak flux density of PKS 0915−11 (Hydra A). The scale is believed to be within 5% of absolute and is the same as that of Harris (1969), which is very close to the scale of Kellermann (1964). In session 9, the noise calibration signal was carefully measured against Hydra A and, in order to provide a uniform scale for all sessions, a large number of the previously observed sources in the ±4° declination zone for which the flux density was greater than 1.0 f.u. were re-observed. These were used as a system of sub-calibrators for each of the other 10 sessions. The estimated r.m.s. error in assigning a value to the noise calibration signal in this manner (σ_{run}) is listed for each session in Table 2. No significant changes in this value have been found during the course of any observing session at 2700 MHz.

For sources with flux densities measured at only one position angle, corrections have been made for linear polarization if the necessary data were available (Gardner, Morris, and Whiteoak 1969; personal communication).

TABLE 3

Position Calibration Grid

PKS Source Number	1950 Coordinates R.A. h m s	Dec. ° ′ ″	S_{2700}* (f. u.)	Identification	Ref.†	Other Catalogue Number
0003-00	00 03 48.70	-00 21 06.6	2.41	$19^m.5$ QSO	8	3C 2
0034-01	00 34 30.52	-01 25 44.3	2.56	$17^m.1$ E	10	3C 15
0035-02	00 35 46.79	-02 24 10.2	4.04	$19^m.6$ E	10	3C 17
0056-00	00 56 31.70	-00 09 16	(1.80)	$17^m.3$ QSO	4	4C-00.6
0106+01	01 06 04.39	+01 19 01.9	(1.88)	18^m QSO	1	4C+01.3
0118+03	01 18 26.15	+03 28 29.3	0.51	18^m QSO	1	4C+03.2
0119-04	01 19 55.91	-04 37 07.0	0.98	17^m QSO	1	4C-04.4
0122-00	01 22 55.5	-00 21 34	1.43	$17^m.0$ QSO	4	
0218-02	02 18 21.90	-02 10 33.0	1.68	$19^m.1$ E	10	3C 63
0232-04	02 32 36.60	-04 15 11.0	0.91	16^m QSO	7	4C-04.6
0240-00	02 40 07.00	-00 13 31.1	3.12	$9^m.7$ Sc	1	3C 71
0305+03	03 05 49.03	+03 55 12.7	[5.33]	$14^m.4$ D	1	3C 78
0336-01	03 36 59.2	-01 56 19	(2.23)	$18^m.4$ QSO	7	CTA 26
0340+04	03 40 51.47	+04 48 21.6	1.55	$18^m.1$ QSO	9	3C 93
0350-07	03 50 04.1	-07 19 55	1.41	16^m QSO	4	3C 94
0420-01	04 20 43.1	-01 27 29	(1.92)	18^m QSO	6	
0430+05	04 30 31.46	+05 15 01.0	(8.4)	15^m S	1	3C 120
0440-00	04 40 05.4	-00 23 22	(3.53)	$18^m.5$ QSO	6	NRAO 190
0458-02	04 58 41.4	-02 03 36	(1.99)	20^m N?	6	
0530+04	05 30 25.29	+04 03 49.8	1.19	19^m D	1	4C+04.18
0736+01	07 36 42.4	+01 43 57	(2.42)	18^m QSO	3	
0812+02	08 12 47.20	+02 04 11	1.18	$18^m.5$ QSO	4	4C+02.23
0812-02	08 12 57.32	-02 59 13.9	0.95	$18^m.9$ D	10	3C 196.1
0957+00	09 57 43.84	+00 19 50.0	0.51	$17^m.6$ QSO	2	4C+00.34
1055+01	10 55 55.5	+01 50 03	(3.02)	18^m QSO	4	4C+01.28
1148-00	11 48 10.23	-00 07 13.1	2.56	$17^m.5$ QSO	1	4C-00.47
1229-02	12 29 25.9	-02 07 31	1.33	$17^m.2$ QSO	3	4C-02.55
1253-05	12 53 35.94	-05 31 08.0	(13.1)	$18^m.0$ QSO	8	3C 279
1335-06	13 35 31.34	-06 11 57.4	1.82	$17^m.7$ QSO	8	MSH 13-0*11*
1340+05	13 40 12.96	+05 19 39.0	1.16	$17^m.8$ N	6	4C+05.47
1454-06	14 54 02.7	-06 05 45	0.82	$18^m.6$ QSO	3	MSH 14-0*18*
1518+04.7	15 18 46.15	+04 40 45.5	2.43	18^m g	1	4C+04.51
1559+02‡	15 59 55.67	+02 06 12.3	[5.04]	$16^m.5$ D	5	3C 327
1603+00	16 03 39.02	+00 08 29.3	1.50	$16^m.5$ E4	1	4C+00.58
1648+05	16 48 39.98	+05 04 35.0	[23.4]	$19^m.0$ D	10	3C 348
1949+02	19 49 44.57	+02 22 37.1	[3.68]	$16^m.4$ SO	10	3C 403
1949-01‡	19 49 55.20	-01 25 07.2	[0.79]	$17^m.5$ E	10	3C 403.1
2045+06	20 45 44.40	+06 50 10.2	1.28	$18^m.4$ E	10	3C 424

TABLE 3 (*Continued*)

PKS Source Number	1950 Coordinates R.A. h m s	Dec. ° ′ ″	S_{2700}* (f. u.)	Identification	Ref.†	Other Catalogue Number
2144-17	21 44 17.62	-17 54 05.6	0.6	$19^m.5$ QSO	1	MSH 21-118
2145+06	21 45 35.9	+06 43 43	3.62	16^m QSO	7	4C+06.69
2159+04	21 59 28.63	+04 20 40.8	0.94	$19^m.5$ E	1	4C+04.76
2203-18	22 03 25.8	-18 50 16	5.20	19^m QSO	7	MSH 22-11
2216-03	22 16 16.3	-03 50 43	1.04	$16^m.4$ QSO	4	4C-03.79
2223-05	22 23 11.05	-05 12 17.0	(5.1)	$18^m.4$ QSO	9	3C 446
2313+03	23 14 02.30	+03 48 56.0	2.38	$18^m.7$ N	10	3C 459
2322-05	23 22 44.72	-05 14 33.6	0.73	$18^m.5$ N	1	4C-05.96
2324-02	23 24 19.40	-02 18 43.7	[1.56]	18^m E	1	MSH 23-011
2349-01	23 49 22.30	-01 25 54.2	1.01	$17^m.5$ N	1	4C-01.60

* Values in square brackets are integrated flux densities, indicating a small degree of resolution by the Parkes telescope at 2700 MHz, while values in parentheses are known or thought to vary.

† References: 1. Bolton (1968); 2. Bolton *et al.* (1965); 3. Bolton and Kinman (1966); 4. Bolton *et al.* (1966); 5. Griffin (1963); 6. Kinman (personal communication); 7. Kinman *et al.* (1967); 8. Sandage, Véron, and Wyndham (1965); 9. Véron (1965); 10. Véron (1966).

‡ Not recommended for further use as a calibrator as there is significant resolution at 2700 MHz.

Many of the stronger sources have angular dimensions large enough to produce significant differences between the peak flux densities and the integrated flux densities. The "size factors" necessary to obtain the integrated flux densities from the peak flux densities have been computed in the conventional manner for sources for which structural information was available from the literature or from unpublished Parkes observations at 5000 MHz.

Peak flux densities and estimated errors, size factors, integrated flux densities, and position angles of observation (where relevant), are listed for the catalogue sources in Tables 4 and 5.

IV. NOTES ON THE CATALOGUES

The sources found in the +4° to −4° declination zone are listed in Table 4, and those in the selected regions in Table 5. (Both tables appear at the end of the paper.) Sources common to the two parts of the survey occur in both catalogues. In each table the contents of the columns are as follows:

(1) Parkes source number. Sources which have been discovered in the course of the 2700 MHz survey are distinguished by an additional digit which represents tenths of degrees in declination.

(2) 4C catalogue number.
(3) Other catalogue designations.
(4) and (5) Measured coordinates, epoch 1950.0. Accurately known coordinates of well-established optical identifications are used where available; references are given in column 13. Radio position declinations have been rounded off to the nearest $0'.1$ ($6''$) arc.
(6) Session in which position and flux density were measured. The corresponding dates are in Table 2.
(7) Position angle of feed during position–flux density observation. No entry in this column means either that measurements were made at orthogonal feed angles (runs 9, 10, and 11) or that the flux density was corrected for polarization from the data of Gardner, Morris, and Whiteoak (1969; personal communication).
(8) Peak flux density at 2700 MHz.
(9) R.M.S. error in peak flux density (see Section VI).
(10) Size factor. Data on angular structure used in the calculation of size factors will be given in a forthcoming paper on the spectra of the sources catalogued at 2700 MHz.
(11) Integrated flux density at 2700 MHz; i.e. peak flux density multiplied by size factor.
(12) Results of optical identification program. The appearance of a $2'$ arc square centred on the radio position is described in the following notation (after Wills and Bolton 1969); QSO. quasi-stellar object, confirmed by ultraviolet excess from photometry, by two-colour (blue and u.v.) photography, or by redshift; QSO? blue stellar object within estimated position errors; S, D, E, DB, N. galaxies of the corresponding optical classification; G. faint galaxy of indeterminate class; II. several faint galaxies within positional errors, the accuracy of the radio position not permitting a unique identification; III. a few stars of normal colour; IIIA. as for III, some obscuration possibly present; IIIB. blank; IIIC. very crowded star field; IV. obscured. The magnitudes given are photographic magnitudes, estimated from the Palomar Sky Survey prints. The r.m.s. error in these estimates is $0^m.5$.
(13) Remarks. Abbreviations used are BSO, blue stellar object; UV, ultraviolet; N, north; S, south; P, preceding; F, following; PA, position angle. The numbers included in parentheses indicate references which are given at the end of Table 4. The first such number refers to the original identification of the source; the second and third numbers indicate respectively the reference for the accurate optical position and the redshift, if these are available.

V. SOURCE POSITION ERRORS

There are three sources of error in the catalogue positions: (*a*) receiver noise and confusion which affect the determination of apparent coordinates for both calibrator and program sources, (*b*) a systematic dependence of the pointing corrections on hour angle, (*c*) random changes in aerial pointing which take place on a time scale comparable with or shorter than the mean period between observations of source and calibrator.

(*a*) *Receiver Noise and Confusion Errors*

The effect of receiver noise on the position measurements was determined by taking the differences between the measured positions of centroids of individual scans and the mean of scan positions in one coordinate for a given source. The shift produced by the output time constant, determined from the difference in positions between forward and reverse scans on sources of high signal-to-noise ratio, was applied to correct the position of each individual scan before taking these differences. The differences were calculated for large numbers of sources in different ranges of flux density. The

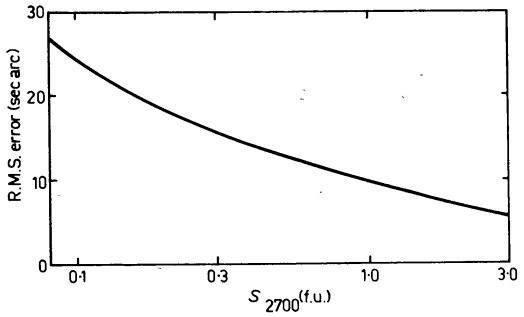

Fig. 1(*a*).—R.M.S. error in the measurement of the position of the centroid of a single scan as a function of peak flux density at 2700 MHz.

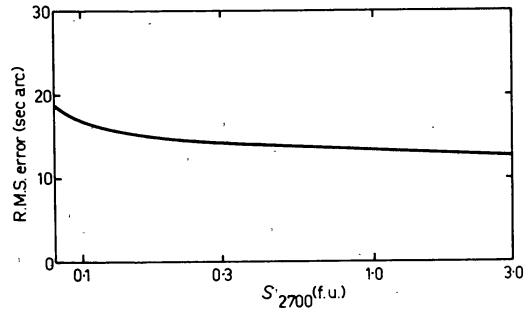

Fig. 1(*b*).—Mean r.m.s. error in the measurement of either source coordinate as a function of peak flux density at 2700 MHz.

resulting r.m.s. errors in positioning the centroids of single scans are plotted as a function of flux density in Figure 1(*a*). As expected, at a level of 50 beam areas per source (S_{2700} = 0.10 f.u.) the measurement of source coordinates rarely showed evidence of confusion effects. The curve in Figure 1(*a*) thus represents resultant errors in the coordinates due to both receiver noise and confusion.

(*b*) *Systematic Hour-angle Effects*

Pointing corrections for both declination and right ascension were plotted against hour angle for observing session 11. A systematic dependence similar to that found by Merkelijn (1968) was obtained. Most sources were observed at hour angles differing by less than 45 min from the calibrator source to which they were referred, and the above plots indicated that the r.m.s. error for these small differences in hour angle is about 10″ arc in either coordinate.

(*c*) *Random Changes in Aerial Pointing with Time*

The scatter among pointing corrections determined from calibrators measured at similar hour angles and within 2 hr was found to be 6″ arc. A similar result has been obtained in previous series of position measurements at Parkes.

Factors (*b*) and (*c*) thus produce a calibration r.m.s. error of 12″ arc. The total r.m.s. error in either coordinate of a source is then $[(\sigma_1^2/n)+(12)^2]^{\frac{1}{2}}$ sec of arc, where σ_1 is the error for a single scan as read from Figure 1(*a*), and n is the number of scans. The estimated total error in either coordinate is shown in Figure 1(*b*). The curve has been calculated from the above expression with n as the mean number of scans per coordinate made for sources in each range of flux density.

VI. FLUX DENSITY ERRORS

Errors in flux density can arise from: (*a*) confusion, (*b*) receiver noise and short-term instabilities, (*c*) polarization, (*d*) calibration, (*e*) position setting corrections, (*f*) zenith angle factor, (*g*) receiver nonlinearity.

(*a*) *Confusion*

Confusion effects are basically of two types: "masking" due to the presence of the stronger sources in the catalogue, and background irregularities caused by the integration of many weak sources into a continuum by the antenna beam. The first effect bears directly on the completeness of the catalogue and is considered in Section VIII. The second affects both measured positions and intensities, and the magnitude of the errors produced is set by the size of the fluctuations in the integrated background. Calculations to determine the error in flux densities have been carried out for the receiver operating in the dual-beam configuration, and the r.m.s. error in flux densities due to background irregularities is estimated as $0.010^{+0.010}_{-0.005}$ f.u. The calculations (Wall 1970) indicate that this quantity is principally determined by the number–flux density relation for the population of sources having intensities between 0.010 and 0.001 f.u.

An integration of 10 scans over 90′ arc with the 2700 MHz receiver in the dual-beam mode (Wall and D. J. Cooke, unpublished data) offers limited support to this estimate of confusion error.

(*b*) *Receiver Noise*

Fluctuations in the receiver output due to noise and short-term instabilities were very similar in all observing sessions. A formal evaluation of the r.m.s. error in flux densities produced by receiver output fluctuations was made from a large sample of sources in session 9. The error in estimating flux density from a single scan was found to be 0.014 f.u. Weak sources for which receiver noise was significant were measured with eight or more scans, the r.m.s. error consequently being reduced to about 0.005 f.u.

(*c*) *Polarization*

To evaluate errors in flux densities resulting from measuring source intensities in only one linear polarization, a sample of 80 sources was chosen from those observed in session 9. The selection criteria were: (1) $0.16 < S_{2700} < 0.42$ f.u. and (2) no

previous attempts at optical identification. In session 9, each source was observed with eight scans, two in each coordinate at a position angle of +45°, and two in each coordinate at a position angle of −45°. In the polarization error analysis, the four scan amplitudes at each polarization, corrected for setting errors, were taken to give estimates of the flux densities in the two polarizations for each source in the sample. The percentage half-differences between these two flux densities were calculated, and the results for all sources in the sample were plotted in a histogram. The standard deviation in this histogram is $(\sigma_{pol}^2+\sigma_n^2)^{1/2}$, where σ_{pol} is the r.m.s. error in flux density due to measurement in one polarization only and σ_n is the r.m.s. error due to receiver noise and errors in the setting corrections. To evaluate σ_n, the averages of the four scan amplitudes in both declination and right ascension, corrected for setting errors, were taken to give two independent estimates of the flux density. The half-differences, calculated as a percentage of the mean flux density, were plotted in a histogram for all sources in the sample. The standard deviation of this histogram is σ_n. In this manner σ_{pol}, the r.m.s. error in flux density due to measurement in only one linear polarization, was determined as 2.9%.

In consequence, all flux densities measured in only one polarization have been assigned an additional r.m.s. error of 2.9%. Flux densities so measured, and corrected to the mean of two orthogonal polarizations where data were available, have been assigned an additional r.m.s. error of 1%. This is representative of the accuracy of the polarization data (Gardner, Morris, and Whiteoak 1969).

(*d*) *Calibration*

The r.m.s. errors in the values assigned to the injected noise calibration for each observing session, σ_{run}, are listed in Table 2. The errors have been estimated from the scatter among several measurements made on the same sub-calibrators in each session, and the estimated total error in the flux densities of the sub-calibrators measured in session 9.

Further calibration error results from short-term gain fluctuations and in measurement of the amplitudes of the calibration signals. The combined effect of these errors was estimated by plotting calibration signal deflections against sidereal time. The scatter indicated a combined r.m.s. error of 1.3% for a single noise calibration signal.

Total calibration error for each source is then $[(\sigma_{run})^2+(1.3/n)^2]^{1/2}$, where n is the number of noise calibrations during the observation and σ_{run} is from Table 2. These errors are of the order of 2%.

(*e*) *Position Setting Corrections*

Errors in the position setting corrections depend on the accuracy to which the apparent coordinates may be measured and the magnitude of the discrepancy between the set and measured coordinates. A mean discrepancy between set and measured coordinates of 50″ arc was found for a large sample of sources whose coordinates were originally estimated from survey records. With 9″ arc as an estimate of the r.m.s. error in measuring apparent coordinates, the mean r.m.s. error in flux densities due to errors in setting corrections is about 1.0%. For many sources in the catalogue, accurate positions had been obtained prior to measurement in the position–flux density program, and the r.m.s. errors due to setting corrections were estimated as 0.2% for these sources.

(*f*) *Zenith Angle Factor*

Zenith angle corrections for the combined effects of atmospheric extinction and aperture efficiency amounted to less than 1% and were applied to all flux densities. The r.m.s. error in flux densities resulting from residual zenith angle corrections was estimated as 0.5% for all zenith angles.

(*g*) *Receiver Nonlinearity*

For sources stronger than 6 f.u. at 2700 MHz, intensity measurements were made with on-source calibration as well as the standard off-source calibration. The means of on-source and off-source calibration deflections were used for the subsequent calculation of flux densities. The mean difference between deflections was about 10% for PKS 0915−11 (peak $S_{2700} \equiv 23.5$ f.u.). For sources stronger than 6 f.u., a 1% r.m.s. error was assumed after correcting for nonlinearity as above.

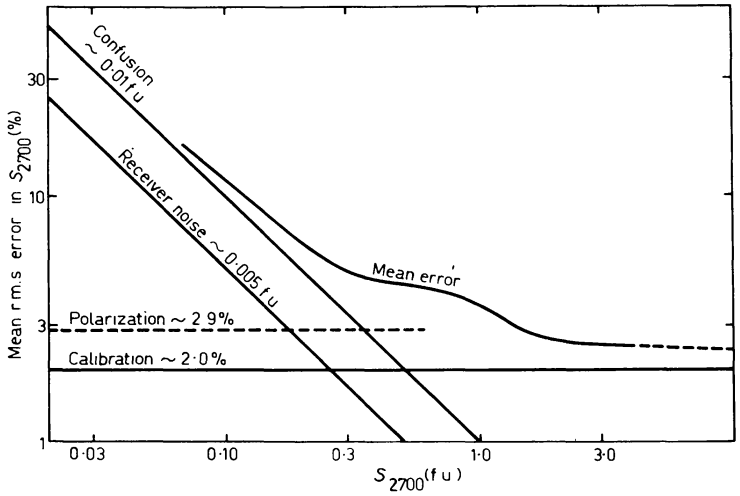

Fig. 2.—Mean r.m.s. error in the 2700 MHz peak flux density as a function of peak flux density.

(*h*) *Total Flux Density Errors*

The errors in peak flux densities shown in Tables 4 and 5 are the square roots of the sums of the squares of the independent errors (*a*) to (*g*). Averaging the errors of all sources in all ranges of flux density produces the curve of mean r.m.s. error versus flux density shown in Figure 2. The dominant source of error for sources having a flux density between 0.10 and 0.40 f.u. is confusion. For stronger sources, the dominant error is in calibration. Polarization becomes the dominant source of error for stronger sources measured in only one position angle and for which polarization data were not available.

VII. IDENTIFICATIONS

All source positions listed in the catalogues (Tables 4 and 5) have been examined on the Palomar Sky Survey prints by Bolton, Wall, and Merkelijn. The two-colour (blue and u.v.) Schmidt plates taken by Bolton have also been searched at the source positions, and QSO identifications made in the regions covered by these plates have

been confirmed from the relative intensities of the optical images. All identifications are given in column 12 of Tables 4 and 5. Many sources in the original Parkes survey at 408 MHz appear in the 2700 MHz survey and have been previously identified; these are indicated in column 13. Full details of the identification program, together with finding charts, have been reported separately by Bolton and Wall (1970) and Merkelijn and Wall (1970).

The identification content of the strongest 440 sources in the 2700 MHz catalogue for the $\pm 4^\circ$ declination zone is given in Table 7. The identifications as given in column 12 of Table 4 have been grouped into QSO's (including the unconfirmed QSO's), galaxies, and non-identifications, and the numbers in each group are given in columns 4, 5, and 6 of Table 7. These are discussed in Section X.

VIII. RELIABILITY AND COMPLETENESS

To describe the quality of catalogues of discrete radio sources, Dixon and Kraus (1968) have defined four quantities: incremental and total reliabilities and incremental and total completenesses. The reliabilities describe the probability of the sources being real. The completenesses describe the ratio of sources in the catalogue to those which should appear in the catalogue by virtue of their true flux density. "Incremental" and "total" refer respectively to the sources having flux densities in the range S to $S+\Delta S$ and to all sources of flux density $> S$. As pointed out by Dixon and Kraus (1968), the quantities can be accurately evaluated only if a survey at the same frequency and of higher angular resolution has been carried out to a lower limiting flux density over the same area of sky, or at least over a significant fraction of it. However, indirect estimates of the quantities may be made, and these represent the best evaluation of surveys of discrete sources.

(*a*) *Reliability*

The procedure of following the survey with position–flux density observations ensured that no spurious sources were added to the catalogue by interference or by receiver instabilities. The only factor which may affect the reliability is the confusion effect of "blends", in which several weak sources of small angular separation are integrated by the beam to appear as a single small-diameter source. The following considerations show that the number of blends accepted as sources above the nominal limit of the selected-region catalogue (S_{2700} = 0.10 f.u.) is negligible.

(1) Confusion effects were apparent on the position–flux density records for less than 10% of all sources stronger than 0.10 f.u. Of this fraction, the number showing beam-broadening which might indicate blending was so small as to be insignificant. The confusion effects generally took the form of sloping baselines indicating the presence of weak neighbouring sources at separations greater than a beamwidth.

(2) In a comparison of the Ohio 1415 MHz survey with the 4C survey, Dixon and Kraus (1968) found a lower limit to the total reliability for the 4C catalogue of 98%. The result is in agreement with a comparison of the 4C catalogue with the selected-region surveys. Out of 43 4C sources listed in the selected regions only one (4C–02.1) does not appear on the survey records and this source may have a very steep spectrum. At the lower flux density limit of 4C (S_{178} = 2 f.u.) the source density is 1 per 28 primary beam areas, while for the selected regions at S_{2700} = 0.10 f.u.

the source density is 1 per 50 beam areas. On this criterion, the total reliabilities for sources in the selected-region and the ±4° declination zone catalogues are estimated to be close to 100%.

(*b*) *Completeness*

The completeness of a survey is affected by two factors: (1) the failure to catalogue sources stronger than the nominal survey limit because of receiver noise and background irregularities, and (2) the masking of sources relatively near the catalogue limit by stronger sources.

For the selected-region surveys, the considerations above indicate that factor (1) is not significant. The effect of (2) has been estimated by taking an area corresponding in size to the original plots of the selected regions (Section III(*b*)) and placing on it in random positions sources obeying a number–flux density relation $N = 104(S_{2700})^{-1.4}$ (Shimmins, Bolton, and Wall 1968). The fraction of sources in each range of flux density which were masked by stronger sources was found by laying the simulated region over each of the selected-region maps. The smoothed results were as follows.

S_{2700} (f.u.)	0.082	0.105	0.148	0.218	0.302	0.594
Total completeness	97.0	98.0	99.0	99.5	100.0	100.0
Incremental completeness		94.5	96.0	97.0	98.0	100.0

Total completeness is estimated to be 98% at a flux density of 0.10 f.u. It will be somewhat less than the 97% indicated at 0.08 f.u. as the effects of receiver instabilities and background irregularities become significant.

The source density in the +4° to −4° declination zone survey is such that completeness depends only on receiver instabilities and background irregularities. The limit for 100% completeness was originally estimated directly at the flux density of 0.35 f.u. for all right ascensions surveyed except 05^h to 06^h. In this region the survey has been estimated as complete to 0.50 f.u., the higher value being due to the presence of several weak extended HII regions. The estimate of 0.35 f.u. over most of the survey region is supported by two considerations. Firstly, about 150 4C sources which do not appear in the ±4° zone catalogue have been observed at 2700 MHz (Wall and Shimmins, unpublished data). Of these, only two were found to be stronger than 0.35 f.u. and were consequently added to the catalogue. Secondly, there is excellent agreement between the source densities found for a flux density of 0.35 f.u. from the selected-region surveys and from the ±4° zone survey.

With regard to the latter consideration, we note that the use of source counts in estimating completeness can be misleading. For example, Dixon and Kraus (1968) base one such estimate on the decrease in slope of the OSU source counts at about 1000 sources per steradian. This decrease they attribute to incompleteness; however, the counts of Gower (1966) and Pooley and Ryle (1968) both show decreasing slope at this source density, the reality of which is not in doubt.

Time variations in the high-frequency flux densities of some sources indicate that to be formally correct the epoch should be included in descriptions of completeness for high-frequency surveys. However, the number of sources believed to be variable at 2700 MHz is small enough to have little effect in this regard.

IX. COMPARISON WITH OTHER OBSERVATIONS

(*a*) *Source Positions*

The right ascensions given in the 4C catalogue (Pilkington and Scott 1965; Gower, Scott, and Wills 1967) are of similar accuracy to those of the Parkes 2700 MHz catalogue. The histograms of Figure 3 present the results of a comparison of the right ascensions of sources common to both catalogues. Sources for which the 2700 MHz observation indicated a lobe shift or possible confusion in the 4C observation have been excluded from the sample. The histograms show the differences (R.A. Parkes–R.A. 4C) for three ranges of 2700 MHz flux density. The mean difference for the 246 sources in the three ranges is +0.15 sec in right ascension (2″.3 arc), and is of little significance. The results of Figure 3 are summarized in Table 6.

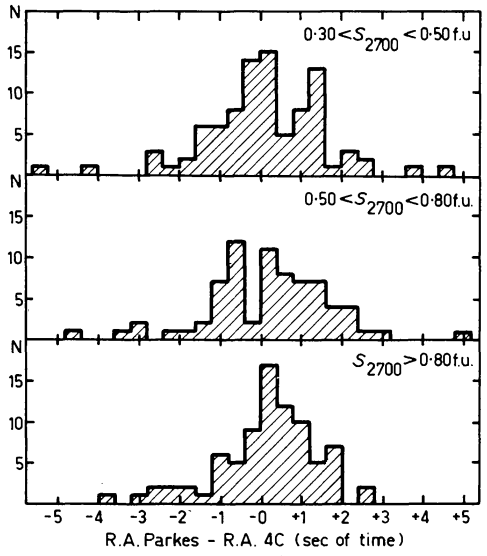

Fig. 3.–Comparison of right ascensions measured in the Parkes 2700 MHz survey with those of the 4C catalogue. Sources which are lobe-shifted or confused in the 4C catalogue have been excluded from the samples.

TABLE 6

Right Ascension Differences, PKS–4C

S_{2700} (f.u.)	Sample Size	$\bar{S}_{2700}$ (f.u.)	$\bar{S}_{178}$ (f.u.)	Standard Deviation Expected	Standard Deviation Observed
0.30 to 0.50	91	0.38	3.52	1^s.70	1^s.49
0.50 to 0.80	73	0.63	4.86	1^s.56	1^s.53
> 0.80	82	1.37	7.69	1^s.39	1^s.23

The expected standard deviations of each histogram are the estimated mean standard deviations of the Parkes and 4C samples added in quadrature. The observed standard deviations are slightly less; this is undoubtedly due to the exclusion of sources which are lobe-shifted or confused in 4C.

Of all sources common to the two catalogues, 8% were found to be lobe-shifted in the 4C catalogue. No declination comparison has been made because the estimated errors in the 4C declinations are an order of magnitude larger than those of the present observations.

The work of Clarke and Munro (1968) indicates indirectly that there is no systematic discrepancy between right ascensions in the Parkes 2700 MHz catalogue and those determined at 408 MHz with the fan beam of the Molonglo cross. They compared right ascensions from the fan beam survey with 4C, and in the declination zone $+4^\circ$ to -4° they found a mean difference of about 0.05 s in right ascension. The result is not significant; however, it is in the same sense as the mean discrepancy between Parkes 2700 MHz and 4C found above and indicates good agreement between the right ascensions of the Molonglo survey and the Parkes 2700 MHz catalogue. Hunstead (1969) has compared Molonglo cross positions with Parkes transit positions (Shimmins, Clarke, and Ekers 1966; Shimmins 1968); again no systematic error is apparent in either right ascension or declination for the $+4^\circ$ to -4° declination zone. The calibration grid used in the present observations is an expanded version of that used in the transit observations, and hence no systematic discrepancy between the source positions in Tables 4 and 5 and Molonglo cross positions is anticipated.

The comparisons indicate that error estimates for both the Parkes 2700 MHz catalogue source positions and the 4C right ascensions in the $+4^\circ$ to -4° declination range are satisfactory, and that in this declination zone no systematic discrepancies in coordinates exist between 4C, Molonglo, and Parkes 2700 MHz catalogue positions.

(*b*) *Flux Densities*

Kellermann, Pauliny-Toth, and Tyler (1968) have published flux densities at 2695 MHz for 638 radio sources, obtained with the N.R.A.O. 140 ft telescope. Quoted errors are about 1% for the stronger sources and 0.04 f.u. for the weaker sources. Of these sources, about 60 appear in the Parkes 2700 MHz catalogue for the $\pm 4^\circ$ declination zone. A comparison of 52 of these sources, none of which are known radio variables or of very large angular extent, yields a ratio S_{2700}/S_{2695} of 1.035 ± 0.007. The Parkes flux density scale thus appears to be slightly more than 3.5% higher than that of Kellermann, Pauliny-Toth, and Tyler (1968). The differences for individual sources are in good agreement with error estimates.

Many of the 2700 MHz flux densities have been compared with those obtained at Parkes by Harris (1969; personal communication). The scatter again agrees with error estimates.

X. SOURCE STATISTICS

The sources in the $+4^\circ$ to -4° declination zone catalogue (Table 4) were listed by computer in order of flux density. The results are summarized in Table 7. Column 1 gives the relative ranks of the sources in terms of flux density (column 2). The cumulative source density N, obtained by dividing column 1 by the area of the survey (0.77 sr), appears in column 3. As discussed in Section VIII, this count is complete to 0.50 f.u., and over 0.73 sr (all the survey area except for R.A. 05^h to 06^h) to 0.35 f.u. The cumulative identification content is given in columns 4, 5, 6, and 7. Nine of the 10 strongest sources in the area have been identified optically, and the fraction identified falls to 61% for the 100 strongest sources, 52% for the 200 strongest sources, and 43% for the 400 strongest sources. About one-half of the identifications are QSO or QSO?, and the other half galaxies. This fraction is almost independent of source density.

TABLE 7

Source Counts and Identification Content, +4° to −4° Dec. Zone

(1) Number of Sources	(2) S_{2700} (f.u.)	(3) N (sr^{-1})	(4) Cumulative Ident. Content QSO +QSO?	(5) Galaxies	(6) Non-ident.	(7) Cumulative Fraction Ident.
1	38.9	–	1	–	–	
10	3.46	13.0	3	6	1	
20	2.47	26.1	5	11	4	
30	1.93	39.1	11	12	7	
40	1.67	52	14	17	9	
50	1.41	65	16	21	13	74%
60	1.27	78	20	22	18	
70	1.07	91	23	26	21	
80	1.00	104	24	28	28	
90	0.88	117	27	29	34	
100	0.82	130	28	33	39	61%
110	0.76	143	29	35	46	
120	0.72	156	32	35	53	
130	0.69	169	33	38	59	
140	0.66	183	39	39	62	
150	0.64	196	42	42	66	56%
160	0.61	208	43	44	73	
170	0.58	222	45	47	78	
180	0.57	234	46	49	85	
190	0.54	248	48	50	92	
200	0.53	261	53	51	96	52%
220	0.50	287	57	54	109	
240	0.46	313	60	57	123	
260	0.43	338	64	60	136	
280	0.42	365	66	61	153	
300	0.39	391	72	65	163	46%
320	0.37	417	73	68	179	
340	0.35	444	78	72	190	
360	0.33	469	82	77	201	
380	0.32	495	85	79	216	
400	0.31	522	87	84	229	43%
420	0.29	547	90	89	241	
440	0.27	574	95	90	255	

Preliminary results of the source counts from these parts of the 2700 MHz survey were reported by Shimmins, Bolton, and Wall (1968). The area of 0.77 sr covered in the +4° to −4° declination zone survey is about double that completed at the time of the 1968 publication, and the results confirm those obtained from the smaller area. For the +4° to −4° declination zone, the graph of cumulative source density N against flux density S_{2700} closely follows $N = 104(S_{2700})^{-1.5}$ between 30 and 600 sources per steradian. The curve (in the log N – log S plane) steepens below 30 sources per

steradian, but statistical uncertainty in this region of source density renders the form of the number–flux density relation* indeterminate. The data in the selected-region catalogue (Table 5) indicate that for N between 600 and 2500 the slope of the relation reduces to -1.4.

At present, the Parkes 2700 MHz survey covers more than 1.7 sr. The source counts from this larger area will be discussed separately.

XI. CONCLUSIONS

A comparison of the results of the first two parts of the Parkes 2700 MHz survey with surveys at lower frequencies indicates the following:

(1) The number–flux density relation at 2700 MHz appears to differ significantly in form from those relations obtained in surveys at much lower frequencies. In particular, in the $\log N - \log S$ plane the number–flux density relations at 178 and 408 MHz show initial slopes of -1.85 up to source densities of approximately 150 sr^{-1} and at higher source densities gradually flatten to values less than -1.5. The 2700 MHz counts indicate a slope of -1.5 for the number–flux density relation to source densities much lower than 150 sr^{-1}.

(2) About 40% of all the sources in the 2700 MHz catalogues appear to be QSO's. This fraction is significantly higher than that of the Parkes 408 MHz survey, in which 25% to 30% of all sources appear to be QSO's. The difference in identification content is particularly noticeable for the stronger sources in each survey, amongst which the identifications are fairly complete.

(3) An investigation of the spectra of sources (to be presented separately) reveals that about 30% of those catalogued at 2700 MHz have radio spectra which either decrease in intensity to the lower frequencies, are enhanced at the high frequencies, or combine the two effects. These spectral features are presumed to be due respectively to synchroton self-absorption at the lower frequencies and to the presence of compact components in which such self-absorption occurs at relatively high frequencies.

Identifications with radio sources exhibiting these spectral features are almost exclusively QSO's; the populations described in (2) and (3) above are virtually identical. Consequently, the choice of a relatively high survey frequency is responsible for the change in proportion of the QSO and radio galaxy populations among the sources catalogued. It is not unreasonable to expect that such a change should result in a different form of number–flux density relation for sources selected at 2700 MHz.

* A distinction is drawn between the "source counts" and the "number–flux density relation". The former is taken to mean the counts of sources above specific flux density levels made directly from observation of a particular region of sky. The latter is the "true" source count, derived from the former with the application of any corrections necessary for experimental factors.

To a source density of 2500 sr^{-1}, it has been shown that with the present survey technique the requisite corrections are negligible (Wall 1970). Consequently, the source count from Tables 4 and 5 represents the 2700 MHz number–flux density relation to an accuracy set only by the statistical uncertainty (at the low source density end in particular) due to the number of sources in the count.

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Note added in Proof. After Tables 4 and 5 were prepared for publication, results of a 1415 MHz survey between declinations 0° and –36° were published by J. R. Ehman, R. S. Dixon, and J. D. Kraus (1970) (*Astr. J.* **75**, 351). Their catalogue contains 79 sources which appear in Tables 4 and 5 and which are not listed in other catalogues.

TABLES 4 AND 5

Catalogues for the +4° to −4° Declination Zone
and for the Selected Regions

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0003-00	-00.1	3C 2 MSH 1	00 03 47.8	-00 21 6	2 3 9		2.40 2.43 2.40	.04 .05 .05	1.000 1.000 1.000	2.40 2.43 2.40	QSO 19.5M	Z=1.037 (42)(42)(26) OPTICAL VARIABLE (42)
0010+00	+00.1	3C5 MSH 2	00 10 35.6	+00 34 54	2 9	135	.95 .91	.04 .02	1.000 1.000	.95 .91	III	
0013-00			00 13 36.7	-00 31 48	2 9	135	.87 .90	.03 .02	1.000 1.000	.87 .90		BSO NEAR POSITION.NO UV EXCESS.IDENT.(8)REVOKED
0018-01	-01.1	MSH 5	00 18 49.9	-01 12 36	3	135	.64	.03	1.000	.64	III	
0019-00	+00.2?	DA9	00 19 51.6	-00 1 42	5 9		1.89 1.90	.05 .04	1.000 1.000	1.89 1.90		FAINT RED OBJECT ON POSITION. CLUSTER 2'F.
0025-007	-00.2		00 25 55.4	-00 43 12	5	135	.59	.03	1.059	.62		17M E 1.0'P.
0026-014			00 26 29.6	-01 29 42	9		.29	.01	1.000	.29		E 1.0'SP.
0028-01	-01.2		00 28 58.9	-01 17 30	5 11	135	.50 .55	.02 .02	1.000 1.000	.50 .55	G 19.4M	PKS 0029-01
0029+01		MSH 6 OB050	00 29 34.3	+01 20 36	9		.32	.01	1.000	.32	III	E4 PREVIOUS IDENT. REVOKED(17)
0031+01	+00.4	OB055	00 31 45.9	+01 2 24	9		.37	.01	1.000	.37		19M N IDENT.REVOKED(17) BSO 0.7'S.
0033-000	-00.3		00 33 54.0	-00 3 30	9		.28	.01	1.000	.28	III	
0034-01	-01.3	3C15 MSH 9	00 34 30.5	-01 25 44	5 9		2.57 2.53	.07 .06	1.003 1.003	2.58 2.54	EO 17.1M	Z=.0733 (6)(50)(15)
0035-02	-02.3	3C17 MSH 9	00 35 46.8	-02 24 10	5 9		4.04 4.04	.10 .09	1.000 1.000	4.04 4.04	E 19.6M	Z=.2201 (37)(38)(46)
0036+03	+03.1	MSH10 OB062	00 36 43.4	+03 3 18	5	135	1.08	.04	1.024	1.11	E2 13.5M	Z=.0145 (17)(52) NGC 193
0037-009			00 37 47.1	-00 56 18	9		.26	.01	1.000	.26	III	
0038-020			00 38 23.8	-02 2 42	5	135	.61	.03	1.000	.61	QSO 18.5M	Z=1.176 (1)

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ FLUX DENSITY PEAK FLUX DENSITY F.U.	(9) R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
0038-019	-02.4	DA20	00 38 49.2	-01 59 18	5		.65	.02	1.000	.65	S 15.0M	
0047+023		OB078	00 47 8.0	+02 20 48	5	135	.32	.02	1.000	.32		18M G 1.5'SF.
0047-02	-03.2	MSH14	00 47 11.1	-02 59 12	5	135	.73	.03	1.000	.73	III	18M QSO PREVIOUS IDENT.
					8	45	.63	.03	1.000	.63		REVOKED(8)
0051-03	-03.3	3C26	00 51 35.6	-03 50 11	8	5	1.08	.03	1.000	1.08	E 19.1M	Z=.2106 (6)(3)(46)
		MSH15			9		1.14	.03	1.000	1.14		
0053-016	-01.4		00 53 28.2	-01 36 24	5		.69	.06	1.027	.71	E 16.4M	PART OF PKS 0053-01
0053-015	-01.4		00 53 52.8	-01 32 48	5		.76	.06	1.027	.78	E 16.7M	PART OF PKS 0053-01
0055-01	-01.5	3C29	00 55 1.4	-01 39 51	5		3.21	.08	1.046	3.36	EO 15.0M	Z=.0450 (6)(50)(40))
		MSH17			9		3.43	.08	1.046	3.59		
0056-00	-00.6	DA32	00 56 31.7	-00 9 16	5		1.96	.05	1.000	1.96	QSO 17.3M	Z=.717 (6)(11)(28)
					8		1.78	.05	1.000	1.78		
					9		1.85	.04	1.000	1.85		
0059+017	+01.1	OB099	00 59 41.0	+01 47 36	5	135	.40	.02	1.000	.40	III	
0103-021			01 03 48.6	-02 11 48	5	135	.42	.02	1.000	.42	QSO 19M	
0105-008	-01.6		01 05 53.2	-00 53 18	5	135	.73	.03	1.000	.73		BSO NEAR POSITION
												NO UV EXCESS
0106+01	+01.2	MSH 1	01 06 4.4	+01 19 2	5		1.73	.03	1.000	1.73	QSO 18.4M	Z=2.107 (4)(3)(14)
		OC012			9		1.98	.05	1.000	1.98		
					11		1.93	.05	1.000	1.93		
0109+02	+02.3	OC015	01 09 42.5	+02 42 0	9		.33	.01	1.000	.33	III	
0111+021		OC019	01 11 9.2	+02 6 30	9		.61	.02	1.000	.61	E 16.3M	
0112-017			01 12 44.4	-01 42 54	9		1.38	.03	1.000	1.38	QSO 18M	
0115+02	+02.4	OC026	01 15 43.0	+02 42 6	9		.88	.02	1.000	.88	QSO 17.5M	Z=.673 (47)
0115-01	-01.7		01 15 43.4	-01 35 42	8	45	.52	.02	1.000	.52	N 18.3M	(8)

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION R.A.	(1950) DEC.	RUN	PA	2700 MHZ FLUX PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	DENSITY SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
0118-00	-00.8		01 18 22.0	-00 11 0	8 9	45	.36 .42	.02 .01	1.000 1.000	.36 .42	III	17M S PREVIOUS IDENT. REVOKED (8)
0118+03	+03.2	0C031	01 18 26.2	+03 28 29	9 11		.52 .51	.02 .02	1.000 1.000	.52 .51	QSO 18M	Z=.765 (17)(3)(1)
0122-005	-00.1		01 22 43.9	-00 34 24	8 9	45 135	.28 .32	.02 .02	1.000 1.000	.28 .32		BSO NEAR POSITION
0122-00			01 22 56.0	-00 21 34	8 9	45	1.42 1.43	.05 .03	1.000 1.000	1.42 1.43	QSO 17.0M	Z=1.070(6)(11)(28)
0123-01	-01.8	3C40 MSH 5	01 23 26.7	-01 36 9	9		2.26	.05	1.218	2.75	DB 13.2M 13.4M	Z=.0180 (36)(19)(30) SEPN.22"EW,18"NS NGC 545/7
0128+03	+04.7	MSH 6 0C047	01 28 39.7	+03 58 24	9		.81	.10	1.018	.82		POSITION AND FLUX ERRORS HIGH. FAINT BSO NEAR POSN.
0128+003	+00.5	0C049	01 28 58.2	+00 18 6	9		.33	.01	1.000	.33	E 16.1M	
0131-00	-00.11		01 31 40.4	-00 11 48	9	45	.68	.03	1.000	.68	G 0.7'E	PREV.IDENT.(8)DOUBTFUL
0137+012	+01.4	0C062	01 37 23.0	+01 16 36	9		1.07	.03	1.000	1.07	QSO 17.5M	
0140-01	-01.9		01 40 44.8	-01 34 30	8	45	.46	.02	1.000	.46	III	
0141+019		0C070	01 41 23.7	+01 56 42	9		.28	.01	1.000	.28	III	
0144-02	-02.8	MSH10	01 44 19.6	-02 12 30	9		.42	.01	1.000	.42		FAINT G 1.0'SF.
0144+037	+03.3	0C074	01 44 42.5	+03 46 6	9		.29	.01	1.000	.29	III	
0146+00	+00.7		01 46 50.7	+00 6 24	11		.22	.01	1.000	.22		G 0,7'S.
0150+00		0C084	01 50 11.0	+00 5 48	11		.22	.01	1.000	.22	III	
0150-03	-03.5		01 50 51.0	-03 49 6	8	45	.40	.02	1.000	.40	III	
0152+033	+03.4	MSH13 0C089	01 52 32.4	+03 23 48	9		.63	.02	1.000	.63	III	

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ FLUX PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	DENSITY SIZE FACTOR	FLUX DENSITY F.U.	IDENTIF-ICATION	REMARKS
0153+03		OC090?	01 53 25.1	+03 17 6	8	45	.38	.02	1.000	.38		G 1.0'SF.
0155+019		OC093	01 55 13.4	+01 55 18	8	45	.27	.02	1.000	.27	III	
					10		.29	.01	1.000	.29		
0157+01	+01.5	MSH14 OC096	01 57 28.9	+01 11 6	8	45	.44	.02	1.000	.44		DB 1.0'NP.
0158+031			01 58 5.0	+03 8 18	9		.28	.01	1.000	.28	QSO 19M	
0159+034		OC099	01 59 15.5	+03 29 12	9		.31	.01	1.000	.31	III	
0202+011		OD004?	02 02 16.9	+01 6 30	9		.31	.01	1.000	.31	IIIB	
0205-010			02 05 53.0	-01 2 24	9		.38	.01	1.000	.38		BSO 0.5'NF.NO UV EXCESS
0207-018	-01.10		02 07 13.1	-01 51 54	5	135	.48	.02	1.000	.48	III	
0211-031			02 11 7.8	-03 10 0	9		.23	.01	1.000	.23		FAINT CLUSTER 1'NP.
0213-026	-02.9	MSH 5	02 13 10.5	-02 37 6	5	135	.50	.02	1.000	.50	IIIB	
0213+025		OD024?	02 13 59.1	+02 30 36	9		.38	.01	1.000	.38	III	
0215+015		OD026	02 15 14.0	+01 30 54	9		.36	.01	1.000	.36	QSO 18.5M	OPTICAL VARIABLE,(13)
0215+02	+02.7	OD028	02 15 58.9	+02 42 36	9		.41	.01	1.000	.41	III	
0216+011			02 16 32.7	+01 6 54	5	135	.50	.02	1.000	.50	III	
0217+01		OD029	02 17 23.6	+01 42 0	3	135	.37	.02	1.000	.37	E7 15.2M	(17)
					9		.35	.01	1.000	.35		
0218-02	-02.10	3C63 MSH 7	02 18 21.9	-02 10 33	5		1.71	.04	1.000	1.71	E 19.1M	(6)(50)
					8		1.65	.04	1.000	1.65		
					9		1.69	.04	1.000	1.69		
0222-00	-00.12		02 22 35.0	-00 49 6	3	135	.66	.03	1.000	.66	SO 16.5M	(8)
					9		.68	.02	1.000	.68		
0225-014	-01.11		02 25 34.5	-01 29 6	3	135	.30	.02	1.000	.30	QSO 18M	Z=.685 (10)

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
0226-038	-03.7		02 26 23.2	-03 51 6	8	45	.66	.03	1.000	.66	QSO 17.5M	Z=.695 (1)
0230-027			02 30 13.0	-02 46 36	3	135	.33	.02	1.000	.33		S 1.4'SP.
0230-03	-03.8		02 30 47.8	-03 34 30	8	45	.34	.02	1.000	.34	III	
0232-02	-02.12		02 32 59.9	-02 32 24	5	135	.58	.02	1.000	.58	QSO 19M	(33)
0237-027			02 37 14.5	-02 47 12	5		.40	.01	1.000	.40	QSO 19.0M	
					8	45	.43	.02	1.000	.43		
					9		.42	.01	1.000	.42		
0240-00	-00.13	3C71	02 40 7.0	-00 13 31	3		3.13	.07	1.000	3.13	SC 9.7M	Z=.00344 (35)(19)(22)
		MSH14			5		3.15	.05	1.000	3.15		SEYFERT GAL. NGC1068
					8		3.05	.08	1.000	3.05		
					9		3.14	.07	1.000	3.14		
0240-034	-03.9		02 40 12.3	-03 24 36	8	45	.27	.01	1.000	.27		TWO FAINT GALS?ON POSN.
0252+02	+02.8	3C74	02 52 33.8	+02 41 36	9		.41	.01	1.000	.41	N 19.9M	(33)
		OD087										
0253-031	-03.10		02 53 20.2	-03 11 36	9		.29	.01	1.000	.29	QSO? 19M	
0256-005			02 56 54.4	-00 31 54	9		.31	.01	1.000	.31	QSO 18.5M	
0300-00	-00.14		03 00 38.2	-00 26 36	5	135	.67	.03	1.000	.67	QSO?18.5M	18M E PREVIOUS IDENT. REVOKED (8)
0303+020	+01.7	OE007	03 03 46.1	+02 4 30	8	45	.46	.02	1.000	.46		G 0.7'NP.
					11		.46	.02	1.000	.46		
0303+033		OE0066	03 03 55.3	+03 18 36	9		.26	.01	1.000	.26	IIIB	
0305+03	+03.5	3C78	03 05 49.0	+03 55 13	5		5.19	.13	1.021	5.30	D 14.4M	Z=.0289 (2)(19)(32)
		MSH 3			9		5.27	.12	1.021	5.38		NGC 1218
0310+013		OE017	03 10 8.4	+01 22 30	9		.25	.01	1.000	.25		BSO NEAR POSITION NO UV EXCESS

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0312-03	-03.11	MSH 1	03 12 52.1	-03 27 48	5	135	.68	.03	1.000	.68	QSO 18.5M	
0313-035			03 13 53.2	-03 31 36	5	135	.23	.01	1.000	.23		BSO 1.0'NF.
0317-02	-02.15		03 17 57.1	-02 19 6	5	135	.36	.02	1.000	.36	QSO 19.5M	
0320+015		0E034	03 20 34.0	+01 35 0	5	135	.52	.02	1.000	.52	III	
0322-03	-03.12		03 22 12.2	-03 35 18	5	135	.51	.02	1.000	.51	III	
0325+02	+02.10	3C88 MSH 5	03 25 18.2	+02 23 20	5 9		2.95 2.98	.07 .07	1.074 1.074	3.17 3.20	D 14.9M	Z=.0302 (31)(50)(32)
0331-01	-01.12	3C89 MSH 3	03 31 42.8	-01 21 24	5 9		1.38 1.38	.04 .03	1.008 1.008	1.39 1.39	D 18.3M	(6)(50)
0332-021			03 32 43.7	-02 6 30	5	135	.43	.02	1.000	.43	III	
0336-017			03 36 29.5	-01 43 0	5 9	135	.59 .58	.02 .02	1.000 1.000	.59 .58	III	
0336-01		CTA26 DA110	03 36 59.2	-01 56 19	5 9 11		2.02 2.37 2.35	.05 .05 .06	1.000 1.000 1.000	2.02 2.37 2.35	QSO 17.5M	Z=.852 (6)(25)(1) OPTICAL VARIABLE (25)
0351-032	-03.14		03 51 43.7	-03 16 48	5	135	.46	.02	1.000	.46	QSO?19.5M	
0353+027	+02.11	0E090	03 53 23.4	+02 47 36	5	135	.47	.02	1.000	.47	N 19.1M	GAL. HAS UV EXCESS
0354+000		0E092	03 54 16.6	+00 5 12	9		.31	.01	1.000	.31		E 1.0'NF.
0358+00	+00.14	3C99 MSH12	03 58 32.8	+00 27 54	5	135	1.06	.04	1.000	1.06		G 0.7'S. IDENT.(54) REVOKED
0358+031			03 58 33.0	+03 10 6	5 9	135	.37 .22	.02 .01	1.000 1.000	.37 .22	IIIA	
0358+021	+02.12	0E098	03 58 34.5	+02 8 54	5	135	.37	.02	1.000	.37	IIIA	
0359+028		0E0999	03 59 57.9	+02 53 42	9	45	.36	.02	1.000	.36	IIIA	
0400-03	-03.16		04 00 47.0	-03 8 30	5	135	.45	.02	1.000	.45	IIIA	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0400+032		0F002	04 00 49.5	+03 17 6	9		.27	.01	1.000	.27	IV	
0402+025		0F004	04 02 48.9	+02 32 42	9		.33	.01	1.000	.33	IV	
0404+03	+03.8	3C105 MSH 3	04 04 45.3	+03 33 24	5 9		3.31 3.28	.08 .07	1.076 1.076	3.56 3.53	IIIA	
0407+012	+01.8	0F012	04 07 4.5	+01 17 0	5	135	.36	.02	1.000	.36	IIIAB	
0409-01	-01.13	3C107 MSH 6	04 09 49.8	-01 7 6	5	135	.72	.03	1.000	.72	III	
0409+025			04 09 53.7	+02 32 48	9		.26	.01	1.000	.26	IIIB	
0410-02	-02.16		04 10 22.7	-02 29 54	9		.33	.01	1.000	.33		BSO ON POSITION NO UV EXCESS
0416-03	-03.18		04 16 16.3	-03 6 30	5	135	.56	.02	1.021	.57	III	
0420+022			04 20 16.6	+02 12 30	5	135	.34	.02	1.000	.34	QSO 19.5M	
0420-01			04 20 43.1	-01 27 29	5 8 9	 45	2.15 1.95 1.76	.06 .07 .04	1.000 1.000 1.000	2.15 1.95 1.76	QSO 18M	Z=.915 (7)(24)(1)
0421+00	+00.15	0F035	04 21 16.7	+00 24 18	5 9	135	1.05 .99	.04 .02	1.000 1.000	1.05 .99	III	
0421+019		0F036	04 21 34.0	+01 57 36	5 11	135	.76 .76	.03 .02	1.000 1.000	.76 .76	QSO 17.5M	Z=.689 (1)
0422+00		0F038	04 22 11.9	+00 29 18	5 9 11	135	1.24 1.32 1.20	.05 .03 .03	1.000 1.000 1.000	1.24 1.32 1.20		BSO ON POSN.IDENT.GIVEN IN(12)HAS STELLAR SPEC.
0428+01	+01.10	MSH 7 3C118	04 28 31.5	+01 6 30	5	135	.90	.04	1.000	.90	III	
0431-02	-02.17	DA141	04 31 23.1	-02 36 18	5	135	1.06	.04	1.000	1.06		FAINT G? ON POSITION

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
0432+03	+03.9	MSH 8	04 32 37.0	+03 28 18	9		.27	.01	1.000	.27	IIIB	OFD 54.9
0439-007	-00.18	MSH15	04 39 20.6	-00 43 30	8	45	.38	.02	1.000	.38	III	
					11		.42	.02	1.000	.42		
0439+01	+01.11	3C124	04 39 23.5	+01 15 24	5	135	.57	.02	1.000	.57		E 0.6'S.PREV.IDENT.
					9		.55	.02	1.000	.55		REVOKED.(5)
0440-00		DA145	04 40 5.4	-00 23 16	5		3.73	.09	1.000	3.73	QSO 18.5M	(7)(24) NRAO 190
					9		3.40	.08	1.000	3.40		
					11		3.35	.08	1.000	3.35		
0442+02	+02.16	MSH10	04 42 3.9	+02 42 30	5	135	.58	.02	1.000	.58	III	OF071
0443-00		DA146	04 43 1.2	-00 24 36	9		.27	.01	1.000	.27	QSO 20M	PKS 0442-00
0445-019			04 45 11.4	-01 58 0	9		.20	.01	1.000	.20	QSO 19M	
0447-010			04 47 10.1	-01 2 24	9		.29	.01	1.000	.29	QSO 19.5M	
0448-025	-02.18	MSH19	04 48 50.1	-02 34 0	9		.25	.01	1.000	.25	G 20.2M	
0453-00	-00.19	MSH20	04 53 15.6	-00 14 24	5	135	.62	.03	1.000	.62	III	
0454+039		OF092	04 54 10.4	+03 56 24	9		.40	.01	1.000	.40	QSO?16.5M	
0457+024		OF097	04 57 15.6	+02 25 0	5	135	1.71	.06	1.000	1.71	QSO? 19M	POSSIBLE UV EXCESS
					9		1.62	.04	1.000	1.62		
					11		1.62	.04	1.000	1.62		
0458+01	+01.12	MSH14	04 58 3.9	+01 25 48	5	135	.52	.02	1.000	.52	E 18.5M	OF098
0458-02	-02.19	DA157	04 58 41.1	-02 3 36	5		1.87	.05	1.000	1.87	N? 20 M	BSO ON POSN.NO UV EXCESS
					6		1.94	.05	1.000	1.94		PREV.IDENT.(6).
					9		1.85	.04	1.000	1.85		
					11		1.60	.04	1.000	1.60		
0500+019		OG003	05 00 44.7	+01 58 48	6		2.47	.06	1.000	2.47	III	
					11		2.47	.07	1.000	2.47		

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ FLUX PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	DENSITY SIZE FACTOR	FLUX DENSITY F.U.	IDENTIF-ICATION	REMARKS
0504+03	+03.10	OG008	05 04 59.7	+03 3 54	6		.75	.02	1.000	.75	QSO? 19M	PROBABLE UV EXCESS (33)
					9		.74	.02	1.000	.74		PREV.IDENT.(17)REVOKED PKS 0505+03
0509-038			05 09 7.0	-03 49 54	6		.39	.02	1.000	.39	IIIA	
0511+00	+00.18	3C135 MSH 2	05 11 33.3	+00 53 18	6		1.65	.05	1.022	1.69	E 17.5M	Z=.1270 (17)(50)(40)
					9		1.67	.04	1.022	1.71		
0519+01		OG033	05 19 41.9	+01 10 42	6		.54	.02	1.000	.54	IIIA	
0534-03	-03.21	DA182	05 34 24.4	-03 11 0	8	45	.39	.02	1.000	.39	IIIA	
					11		.35	.01	1.000	.35		
0550+032		OG083	05 50 12.3	+03 12 42	9		.77	.02	1.000	.77	IV	
					11		.65	.02	1.000	.65		
0554-026			05 54 23.1	-02 41 48	9		.51	.02	1.000	.51	IV	
0559+02	+02.17	OG099	05 59 2.9	+02 27 24	11		.29	.01	1.000	.29	IIIA	PKS 0558+02
0723-008			07 23 17.6	-00 49 0	10		2.99	.07	1.000	2.99	III	DW0723-00
					11		3.07	.08	1.000	3.07		
0723-036			07 23 36.0	-03 38 30	10		.32	.01	1.000	.32	DB	17.5M+18.0M
0724-01	-02.31	3C180 MSH 6	07 24 33.3	-01 58 24	10		1.54	.04	1.013	1.56	G 20.2M	(6)(50)
0725+001		OI041	07 25 1.0	+00 10 54	10		.27	.01	1.000	.27	III	
0726-00	-00.25		07 26 14.2	-00 2 30	10		.40	.02	1.000	.40	G 20.2M	(8)
0727-025			07 27 55.4	-02 35 12	10		.28	.01	1.000	.28	III	
0729+019			07 29 46.6	+01 57 0	10		.32	.01	1.000	.32	III	
0731+02	+02.20	OI052	07 31 17.2	+02 9 18	10		.58	.02	1.000	.58	III	
0736-01	-01.18	MSH 8	07 36 1.7	-01 57 18	10		.64	.02	1.000	.64	QSO 18M	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ PEAK FLUX DENSITY F.U.	FLUX R.M.S. ERROR F.U.	DENSITY SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
0736+01		0I061	07 36 42.4	+01 43 57	7		2.30	.06	1.000	2.30	QSO 18M	Z=.191 (5)(9)(28)
					9		2.60	.05	1.000	2.60		
					10		2.22	.04	1.000	2.22		
					11		2.48	.06	1.000	2.48		
0737-030	-03.27		07 37 58.7	-03 3 54	10		.35	.01	1.000	.35	III	
0738-00	-00.26	MSH 9	07 38 35.3	-00 59 6	11		.38	.02	1.000	.38	III	
0742+02	+02.21	3C187 MSH 4	07 42 27.9	+02 7 45	7	45	.79	.03	1.040	.82	G 19.5M	(54)(50)
0743-006			07 43 20.8	-00 37 0	7	45	1.41	.05	1.000	1.41	QSO? 18M	4C-00.28?
					9		1.37	.03	1.000	1.37		
					11		1.42	.04	1.000	1.42		
0747-00	-00.30		07 47 6.0	-00 2 12	7	45	.43	.02	1.000	.43	III	19M DB IDENT.(8)REVOKE
0752-026	-02.33		07 52 16.8	-02 39 30	7	45	.46	.02	1.000	.46	N 19.4M	PKS 0752-02.7
0752-02			07 52 26.6	-02 14 54	7	45	.42	.02	1.000	.42	DB	15.8M+16.2M PKS 0752-02.3
0753+02	+02.22	3C188 0I086	07 53 9.0	+02 18 42	7	45	.45	.02	1.000	.45	III	
0755+029		0I091	07 55 5.2	+02 59 6	7	45	.49	.02	1.000	.49	III	DW 0755+03
0757+025		0I095	07 57 27.3	+02 31 6	7	45	.27	.02	1.000	.27	III	
0802-010			08 02 46.7	-01 2 54	9	135	.35	.02	1.000	.35	III	
0803-00	-00.32	MSH 2	08 03 4.0	-00 49 42	5	135	.71	.03	1.000	.71	E4 15.4M	(6)
0803-023	-02.34		08 03 41.1	-02 23 24	9		.35	.01	1.000	.35	III	
0808+019		0J014	08 08 51.0	+01 55 48	5	135	.65	.03	1.000	.65		DW0808+01.BSO ON POSN. NO UV EXCESS
					11		.80	.02	1.000	.80		

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ FLUX DENSITY PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
0812+02	+02.23	MSH 2 0J021	08 12 47.2	+02 4 11	5 7 9 11	135 45	1.16 1.19 1.21 1.17	.04 .05 .02 .03	1.000 1.000 1.000 1.000	1.16 1.19 1.21 1.17	QSO 18.5M	Z=.406 (17)(11)(26)
0812-02	-02.35	MSH 5	08 12 57.3	-02 59 14	5 9	135	.94 .95	.04 .02	1.000 1.000	.94 .95	D 18.9M	(6)(50).3C196.1
0813+020			08 13 20.8	+02 5 18	5 9	135	.38 .38	.02 .01	1.000 1.000	.38 .38	III	
0819-032			08 19 10.0	-03 13 36	5	135	.42	.02	1.000	.42		BSO ON POSITION NO UV EXCESS
0823+033		0J038	08 23 13.5	+03 19 18	5 9 11	135	.82 .91 .82	.03 .02 .02	1.000 1.000 1.000	.82 .91 .82		18M G 1.0'F. 16.5M DB 1.5'N.
0825+013	+01.22	0J042	08 25 24.7	+01 22 36	9		.30	.01	1.000	.30	III	
0828-03	-03.32		08 28 14.1	-03 30 36	5	135	.53	.02	1.000	.53	QSO? 20M	DOUBTFUL UV EXCESS
0833-01			08 33 3.0	-01 40 42	5	135	.53	.02	1.057	.56	E 13.9M	(8)
0835-013			08 35 58.5	-01 23 54	9		.32	.01	1.000	.32	III	
0836-00	-00.34		08 36 19.9	-00 27 42	9		.31	.01	1.000	.31	III	
0837+035		0J063	08 37 12.8	+03 30 18	5	135	.69	.03	1.000	.69	QSO?20.0M	
0837+012		0J062	08 37 14.2	+01 15 24	9		.25	.01	1.000	.25	QSO 19M	
0849+008	+01.23	0J083	08 49 52.2	+00 53 48	9		.24	.01	1.000	.24	III	
0850-03	-03.34		08 50 56.3	-03 30 6	5	135	.75	.03	1.000	.75		TWO BSO'S NEAR POSN. NO UV EXCESS
0852+029	+03.14		08 52 32.1	+02 56 42	5	135	.38	.02	1.000	.38	III	
0853+03			08 53 .7	+03 23 48	11		.35	.01	1.000	.35	QSO?17.5M	(33)
0854-03	-03.35		08 54 41.6	-03 27 12	5	135	.66	.03	1.000	.66	II	SEVERAL FAINT GALS. 18M QSO IDENT.(8)REVOKED

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX R.M.S. ERROR F.U.	(9) DENSITY SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIFICATION	(12) REMARKS
0859+032		OJ098	08 59 15.0	+03 16 12	9		.34	.01	1.000	.34	G 20.2M	
0904+039			09 04 4.9	+03 54 30	5	135	.44	.02	1.000	.44	III	
0906+011			09 06 34.3	+01 6 42	9		.28	.01	1.000	.28	III	
0906+01	+01.24		09 06 36.0	+01 33 48	5		1.26	.03	1.000	1.26	QSO 17.5M	(12)
					9		1.18	.03	1.000	1.18		
					11		1.16	.03	1.000	1.16		
0907+022			09 07 5.6	+02 12 18	9		.19	.01	1.000	.19		BSO NEAR POSITION NO UV EXCESS
0907-023			09 07 13.8	-02 19 36	5	135	.57	.02	1.000	.57	QSO 18.0M	
0909+003		OK015	09 09 8.2	+00 23 48	9		.26	.01	1.000	.26	III	
0912+029		OK020	09 12 1.8	+02 58 42	5	135	.54	.02	1.000	.54	QSO 18.5M	
0913-025	-02.38		09 13 48.5	-02 31 36	9		.28	.01	1.000	.28	QSO 18.5M	
0922+005		OK037	09 22 34.4	+00 32 6	5	135	.68	.03	1.000	.68	QSO 18.5M	Z=1.72 (10)
					11		.76	.02	1.000	.76		
0927+02		OK045	09 27 30.5	+02 2 6	11		.32	.01	1.000	.32	III	
0932+02	+02.27	OK055	09 32 42.1	+02 17 18	5	135	.53	.02	1.000	.53	QSO 18M	Z=.659(10)17M E IDENT. (17) REVOKED
0936+02	+02.28	OK061	09 36 39.2	+02 13 42	11		.28	.01	1.000	.28	III	
0937+033			09 37 12.9	+03 19 6	9		.28	.01	1.000	.28	III	
0938-01	-01.19	MSH 7	09 38 50.4	-01 29 24	5	135	.53	.02	1.000	.53		FAINT RED OBJ.ON POSN.
0940+02	+02.29		09 40 37.6	+02 57 12	5	135	.87	.03	1.000	.87	III	
					9		.85	.02	1.000	.85		
0940+00	+00.30	OK067	09 40 45.3	+00 9 18	5	135	.73	.03	1.000	.73	III	
0945+003	+00.31	OK075	09 45 11.8	+00 18 24	5	135	.39	.02	1.000	.39		FAINT BSO 0.2'P.

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ PEAK FLUX DENSITY F.U.	FLUX DENSITY R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
0949+00	+00.32	3C230 MSH 8	09 49 24.8	+00 12 24	5 9		1.53 1.51	.04 .04	1.006 1.006	1.54 1.52		18.5M N 0.4'NF. PREV.IDENT.(5)REVOKED
0950+00			09 50 13.3	+00 14 30	5	135	.43	.02	1.000	.43	QSO 19.5M	OPTICAL VARIABLE(13)
0955+036	+03.17	MSH10	09 55 21.1	+03 41 30	5	135	.35	.02	1.000	.35		17M G 0.7'F. PART OF PKS 0955+03
0955+036	+03.17	MSH10	09 55 48.1	+03 38 48	5	135	.35	.02	1.000	.35		FAINT BSO 0.3'NP. PART OF PKS 0955+03
0955-01	-01.20		09 55 56.2	-01 25 42	5	135	.72	.03	1.000	.72		BSO NEAR POSITION STELLAR SPECT.(47)
0956+015		OK094	09 56 46.3	+01 32 24	9		.30	.01	1.000	.30	DB? 15.8M	
0957+00	+00.34	OK096	09 57 43.8	+00 19 50	5 9 11	135	.51 .53 .51	.02 .02 .02	1.000 1.000 1.000	.51 .53 .51	QSO 17.6M	Z=0.907 (4)(4)(29)
0958-001	-00.37		09 58 49.9	-00 11 48	5	135	.58	.02	1.000	.58		19M DB 0.5'NF.
1004-018			10 04 32.3	-01 52 42	5 11	135	.53 .59	.02 .02	1.000 1.000	.53 .59	QSO 19.0M	
1005+007		OL009	10 05 37.3	+00 44 36	9		.34	.01	1.000	.34	N 16.9M	
1008-01	-01.21		10 08 19.8	-01 46 18	5	135	.77	.03	1.042	.80	S? 19.4M	
1008+013		OL014	10 08 41.7	+01 21 42	9		.24	.01	1.000	.24	QSO 19M	
1012+022	+02.30	OL021	10 12 40.9	+02 14 0	8 9	45	.40 .40	.02 .01	1.000 1.000	.40 .40	QSO 18M	
1014+018		OL023	10 14 2.0	+01 52 12	9		.32	.01	1.000	.32	III	
1021+028			10 21 18.7	+02 48 24	9		.22	.01	1.000	.22	QSO? 19M	
1021-00			10 21 55.8	-00 37 36	5	135	.95	.04	1.000	.95	QSO?18.5M	(8)

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1027+00	+00.35	OL045	10 27 36.6	+00 52 48	5	135	.61	.03	1.000	.61	G 19.4M	
1033+003	+00.37	OL055	10 33 32.5	+00 21 48	9		.34	.01	1.000	.34	E 16.5M	
1039+02	+03.18	DA288	10 39 4.7	+02 58 18	5		1.67	.04	1.000	1.67	G 19.4M	
					9		1.65	.04	1.000	1.65		
1044-00	-00.39	MSH17	10 44 48.8	-00 50 12	9		.32	.01	1.000	.32	III	
1045+019			10 45 49.9	+01 57 36	5	135	.41	.02	1.000	.41	III	OL076?
1046-02	-02.43	MSH18	10 46 53.7	-02 39 12	8	45	.52	.02	1.000	.52	III	
					11		.50	.02	1.000	.50		
1048+00	+00.38	MSH 9 OL080	10 48 5.2	+00 12 18	10		.31	.01	1.000	.31	III	
1051+035	+03.19		10 51 51.8	+03 30 42	9		.29	.01	1.000	.29	DB 20.2M	
1052-004	-00.41		10 52 22.9	-00 29 42	9		.34	.01	1.000	.34	QSO? 18M	
1052+023	+02.31		10 52 44.0	+02 21 42	9		.34	.01	1.000	.34	III	
1054+004		OL091	10 54 41.7	+00 27 54	5	135	.58	.02	1.000	.58	III	
1055+01	+01.28	DA293 OL093	10 55 55.5	+01 50 3	5		3.15	.08	1.000	3.15	QSO 18M	(17)(11)
					7		3.02	.07	1.000	3.02		
					9		3.03	.06	1.000	3.03		
					10		2.88	.07	1.000	2.88		
					11		3.03	.08	1.000	3.03		
1055-028			10 55 38.7	-02 53 18	9		.42	.01	1.000	.42	III	
1059-01	-00.42	3C249 MSH21	10 59 30.9	-01 0 0	7		1.32	.04	1.000	1.32	III	
					9		1.36	.03	1.000	1.36		
1059-023	-02.44		10 59 52.6	-02 19 18	7	45	.50	.02	1.000	.50	IIIB	
1103+002		OM005	11 03 16.8	+00 13 0	10		.29	.01	1.000	.29	S 9.8M	Z=.00205 (22) NGC 3521
1103-006	-00.43		11 03 58.7	-00 36 36	7	45	.68	.03	1.000	.68	QSO?16.5M	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1105-028	-02.45		11 05 4.3	-02 51 54	7	45	.36	.02	1.000	.36	QSO?19.5M	
1105+037			11 05 39.9	+03 43 18	7	45	.43	.02	1.067	.46	III	
1106+023			11 06 10.9	+02 18 54	7	45	.64	.03	1.000	.64	N 18.9M	
1106-003			11 06 17.4	-00 22 30	7	45	.26	.01	1.000	.26	QSO?19.5M	
1108+03	+03.21		11 08 49.4	+03 25 30	7	45	.48	.02	1.000	.48	III	
1110-01	-01.25	MSH 5	11 10 59.4	-01 56 12	7	45	.84	.03	1.000	.84	III	
1111-037	-03.41		11 11 58.5	-03 44 36	7	45	.36	.02	1.000	.36	G18.3M/	BOTH OBJECTS NEAR POSN.
					9		.34	.01	1.000	.34	QSO?18.5M	
1115-023	-02.46		11 15 2.0	-02 19 42	7	45	.62	.03	1.000	.62	III	
1116-02	-02.47	3C255 MSH 8	11 16 52.2	-02 46 30	7	45	.59	.03	1.000	.59		FAINT RED OBJ. ON POSN.
1118+000			11 18 45.0	+00 3 0	7	45	.43	.02	1.016	.44	DB	17.0M+18.5M
1122-037			11 22 10.5	-03 43 24	7	45	.47	.02	1.000	.47		FAINT G 1'F.
1123+012			11 23 21.1	+01 16 6	7	45	.25	.01	1.000	.25		FAINT BSO NEAR POSN.
1127+005	+00.40	MSH 7 OM045	11 27 2.8	+00 31 48	7	45	.58	.02	1.000	.58	G	CLUSTER ON POSN. CANNOT SELECT RADIO GALAXY
1127-032	-03.42	MSH10	11 27 36.0	-03 12 54	7	45	.33	.02	1.000	.33	III	
					9		.31	.01	1.000	.31		
1127+012	+01.30		11 27 47.6	+01 14 54	7	45	.41	.02	1.000	.41	N 17.8M	
1130-037	-03.43		11 30 31.0	-03 44 18	7	45	.54	.02	1.000	.54	E 15.3M	
1130+009			11 30 47.3	+00 57 24	7	45	.32	.02	1.000	.32	QSO? 19M	OM050?
1132-000	-00.45		11 32 40.1	-00 4 54	7	45	.73	.03	1.000	.73	III	
1133-032	-03.44		11 33 42.3	-03 14 12	7	45	.20	.01	1.570	.31	III	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC,	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1134+01	+01.31		11 34 56.4	+01 32 42	7	45	.55	.02	1.000	.55		G 1.0'NF.
1138+01	+01.32	MSH 8	11 38 35.1	+01 30 54	7		1.57	.04	1.000	1.57	III	
					9		1.57	.04	1.000	1.57		
1141+011			11 41 35.5	+01 11 12	7	45	.34	.02	1.000	.34	G 19.4M	
					9	45	.32	.02	1.000	.32		
1142-00	-00.46	MSH16	11 42 21.9	-00 15 12	7	45	.43	.02	1.000	.43		BSO 1.0'P.
1146-037			11 46 23.9	-03 47 30	8	45	.40	.02	1.036	.41	QSO 17M	
					9		.37	.01	1.036	.38		
1147+015	+01.33		11 47 51.5	+01 32 42	7	45	.31	.02	1.000	.31	G 19.9M	
1148-00	-00.47		11 48 10.2	-00 7 13	7		2.58	.05	1.000	2.58	QSO 17.7M	Z=1.982 (7)(3)(16)
					8		2.55	.04	1.000	2.55		
					9		2.54	.06	1.000	2.54		
					11		2.58	.06	1.000	2.58		
1159-02	-02.50		11 59 57.5	-02 23 36	5	45	.43	.02	1.000	.43	III	18.2M E PREV.IDENT. (8) REVOKED
1207-013			12 07 57.6	-01 20 12	5	45	.37	.02	1.000	.37	DB 19.4M	
					9		.40	.01	1.000	.40		
1212-00	-00.48	MSH 7	12 12 14.3	-00 43 36	5	45	.51	.02	1.000	.51	III	
					8	135	.57	.02	1.000	.57		
					9		.54	.02	1.000	.54		
1215+03	+04.41	MSH 4	12 15 0	+03 54 48	5		1.15	.03	1.071	1.23	D+E	17.3M Z=.0756;17.3M Z= .0771 (19)(15) COMPLEX.
					9		1.12	.03	1.071	1.20		
1217+02			12 17 39.3	+02 20 18	5	45	.47	.02	1.000	.47	QSO 16.5M	Z=.240 (4)(4)(29)
					9		.45	.02	1.000	.45		
					11		.48	.02	1.000	.48		
1218-02	-02.53		12 18 51.5	-02 25 36	5	45	.54	.02	1.000	.54	QSO 20M	OPTICAL VARIABLE(13)
1222+037	+03.23		12 22 19.2	+03 47 30	5	45	.82	.03	1.000	.82	QSO? 19M	
					11		.80	.02	1.000	.80		

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1225-02	-02.54		12 25 24.5	-02 20 18	5	45	.40	.02	1.000	.40	QSO? 19.5M	
1226+02	+02.32	3C273 MSH 8	12 26 33.3	+02 19 44	9		38.89	.95	1.000	38.89	QSO 12.8M	Z=.158 (21)(23)(45) OPTICAL VARIABLE (49)
1229-02	-02.55		12 29 25.9	-02 7 31	5		1.36	.04	1.000	1.36	QSO 16.7M	Z=.388 (7)(9)(26)
					9		1.32	.03	1.000	1.32		
					11		1.32	.03	1.000	1.32		
1229-01			12 29 32.3	-01 18 24	5	45	.47	.02	1.000	.47	III	
1247+025			12 47 58.4	+02 32 30	5	45	.42	.02	1.000	.42	III	
1249+035			12 49 50.0	+03 32 12	5	45	.60	.03	1.000	.60	E2 16.8M	
1250+029	+02.34		12 50 30.3	+02 54 42	5	45	.89	.04	1.000	.89	III	
					9		.92	.02	1.000	.92		
1253+026	+02.35		12 53 31.4	+02 36 54	5	45	.30	.02	1.000	.30		FAINT RED OBJ.ON POSN.
1256+018			12 56 35.9	+01 52 24	9		.29	.01	1.000	.29	III B	
1302-035			13 02 8.9	-03 30 6	5	45	.53	.02	1.000	.53	QSO?19.5M	
1305-012			13 05 38.6	-01 13 0	9		.28	.01	1.000	.28	III	
1307+000	+00.46		13 07 16.5	+00 3 0	5	45	.82	.03	1.000	.82	D 19.4M	PKS 1307-00.1
1307-007			13 07 54.7	-00 43 30	9		.22	.01	1.000	.22		15.6M E 1'P.PREV.IDENT. (3)REVOKED.PKS1307-00.7
1317-00	-00.50	MSH 8	13 17 4.1	-00 34 12	5		1.00	.03	1.000	1.00	QSO 18.5M	Z=.89 (10)
					9		.96	.02	1.000	.96		
1317+019			13 17 53.0	+01 55 54	5	45	.54	.02	1.000	.54	III	
					11		.57	.02	1.000	.57		
1320+03	+03.27		13 20 47.4	+03 23 54	5	45	.76	.03	1.000	.76	D 19.9M	(17)
					9		.74	.02	1.000	.74		
1324-025			13 24 32.0	-02 33 48	5	45	.31	.02	1.000	.31	G 19.4M	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ PEAK FLUX DENSITY F.U.	FLUX DENSITY R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIF-ICATION	REMARKS
1325-01	-01.29		13 25 4.3	-01 47 24	5	45	.71	.03	1.000	.71	D 18.7M	(8)
1330+02	+02.36	MSH 7	13 30 20.5	+02 16 9	9		1.82	.04	1.050	1.91	N 19.1M	Z=.2156 (17)(50)(39) 3C 287.1
1336+020	+02.37		13 36 58.8	+02 0 36	1	135	.38	.02	1.000	.38	III	
					2	135	.39	.01	1.000	.39		
1337-033			13 37 38.1	-03 20 12	1	135	.58	.02	1.000	.58	III	
					2	135	.58	.03	1.000	.58		
1340+022	+02.38	MSH 9	13 40 16.6	+02 13 0	1	135	.54	.02	1.000	.54	III	
1343-00	-00.51		13 43 3.1	-00 41 48	1	45	.62	.03	1.000	.62	III	17M QSO?PREV.IDENT. (8) REVOKED.PKS 1342-00
1349-01	-01.30		13 49 49.4	-01 41 24	2	135	.31	.02	1.000	.31	G 19.6M	
1349+027			13 49 58.2	+02 47 24	1	45	.81	.03	1.000	.81	III	DW 1349+02
					8	45	.77	.03	1.000	.77		
					9		.72	.02	1.000	.72		
1351+021			13 51 22.1	+02 6 54	2	135	.50	.02	1.000	.50		19M BSO WITH UV EXCESS 0.7'SP.
					8	45	.44	.02	1.000	.44		
					11		.46	.02	1.000	.46		
1351-018			13 51 32.8	-01 51 18	2	135	1.00	.04	1.000	1.00		FAINT BSO WITH UV EXCESS 1.0'NP.
					8	45	.98	.04	1.000	.98		
					9		.97	.02	1.000	.97		
					11		.99	.03	1.000	.99		
1352+00			13 52 35.3	+00 55 30	2	135	.40	.02	1.000	.40	QSO? 19M	(33)
					8	45	.30	.02	1.000	.30		
1353-005	-00.52		13 53 48.4	-00 34 36	2	135	.32	.02	1.000	.32	III	
					8	45	.31	.02	1.000	.31		
1354+01	+01.39	DA353	13 54 28.5	+01 19 18	1		1.27	.03	1.000	1.27		18.2M E 0.8'N.PREV. IDENT.REVOKED
					2		1.32	.03	1.000	1.32		
					8		1.31	.03	1.000	1.31		
					9		1.30	.03	1.000	1.30		

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION R.A.	(1950) DEC.	RUN	PA	2700 MHZ FLUX DENSITY PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
1355+01		DA355	13 55 20.6	+01 1 6	8 9	45	1.00 1.01	.04 .03	1.000 1.000	1.00 1.01		BSO 1.0'NP.
1356+022			13 56 55.1	+02 14 6	8	45	.66	.03	1.000	.66	QSO? 18.5M	
1359+025	+02.39		13 59 59.4	+02 30 30	8	45	.57	.02	1.000	.57	N 19.4M	
1359+039			13 59 52.9	+03 57 0	8	45	.33	.02	1.000	.33	QSO?19M	
1402-012			14 02 11.7	-01 16 6	8	45	.71	.03	1.000	.71	QSO? 18.5M	
1403-02	-02.59	DA358	14 03 36.9	-02 29 36	8	45	.46	.02	1.000	.46	III	
1404-01	-01.31	MSH 1	14 04 14.7	-01 40 0	8	45	.58	.02	1.000	.58	G 20.2M	G VERY BLUE (8)
1405+01			14 05 59.6	+01 30 24	8	45	.38	.02	1.000	.38		BSO 0.7'P.
1407+022			14 07 32.6	+02 17 18	8	45	.49	.02	1.000	.49	QSO?19M	
1414-03	-03.50	3C297 MSH 7	14 14 46.9	-03 47 0	8 9	45	1.00 .94	.04 .02	1.000 1.000	1.00 .94	III B	
1416-000			14 16 41.1	-00 0 36	8	45	.20	.01	1.000	.20	III	
1416-015	-01.33		14 16 49.9	-01 35 42	8	45	.30	.02	1.000	.30	III	
1418-025	-02.60		14 18 39.0	-02 33 36	8	45	.25	.01	1.000	.25	G 18.1M	
1420-005	-00.55		14 20 53.3	-00 35 42	8	45	.23	.01	1.000	.23	III	
1425+03	+03.29		14 25 2.9	+03 29 12	8	45	.33	.02	1.000	.33	QSO?19M	PKS 1424+03
1425-01	-01.34		14 25 56.4	-01 10 42	8 9		1.66 1.62	.04 .04	1.000 1.000	1.66 1.62	N 17.3M	(6) JET IN PA 260 3C 300,1
1426+030			14 26 32.5	+03 5 0	8	45	.43	.02	1.000	.43		FAINT RED OBJ.ON POSN.
1427-01	-01.35	MSH11	14 27 14.2	-01 0 24	8	22	.39	.02	1.000	.39	III	PKS 1427-00
1428-03	-03.52	MSH12	14 28 13.7	-03 21 42	8	45	.41	.02	1.000	.41		FAINT BSO 1.0'F.

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1431+018			14 31 34.6	+01 50 0	8	45	.32	.02	1.000	.32	E 17.4M	
1434+03	+03.30	MSH10	14 34 25.6	+03 37 18	8		1.93	.05	1.000	1.93		FAINT G 1.0'NF.
					9		1.91	.04	1.000	1.91		
1434+019			14 34 58.8	+01 57 0	8	45	.36	.02	1.000	.36		FAINT G 1.5'NP.
1435+038			14 35 52.4	+03 53 6	8	22	.35	.02	1.000	.35	G 17.8M	
1440-01	-01.36		14 40 32.6	-01 4 54	8	45	.26	.01	1.000	.26	III	
1442-029			14 42 19.8	-02 59 6	8	45	.27	.02	1.000	.27	E 17.6M	
1443-032		MSH16	14 43 5.6	-03 17 30	8	45	.25	.01	1.000	.25	III	
1446+00	+00.52		14 46 6.0	+00 30 30	8	45	1.04	.04	1.000	1.04	E 19.4M	(17)FAINTER G NEAR POSN.
1446-005			14 46 42.0	-00 33 0	8	45	.33	.02	1.000	.33	III	
1449-012			14 49 12.5	-01 15 18	8	45	.35	.02	1.000	.35	QSO 18M	
1449+007	+00.53		14 49 25.2	+00 44 42	8	45	.23	.01	1.000	.23	III	
1454-034	-03.53		14 54 33.5	-03 27 24	8	45	.30	.02	1.000	.30	QSO?17M	
					9	45	.29	.02	1.000	.29		
1500-023	-02.62		15 00 59.4	-02 18 54	8	45	.59	.02	1.000	.59	III	
1502+036			15 02 35.8	+03 38 24	8	45	.46	.02	1.000	.46	QSO?19M	PART OF 4C+03.31
					11		.51	.02	1.000	.51		
1502+039			15 02 34.8	+03 59 6	11		.25	.01	1.000	.25		BSO 0.6'NP. PART OF 4C+03.31
1503-001	-00.58	MSH 1	15 03 1.7	-00 6 18	8	45	.55	.02	1.000	.55	III	
1505+01	+01.41		15 05 58.7	+01 13 24	8	45	.56	.02	1.000	.56	III	PREV.IDENT.(12)HAS STELLAR SPECTRUM(10)
1508+004	+00.55	MSH 3	15 08 29.9	+00 25 42	8	45	.43	.02	1.000	.43	IIIB	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1509+022			15 09 44.5	+02 14 36	8	45	.69	.03	1.000	.69	III	
1509+01	+01.42		15 09 53.7	+01 32 18	8	45	1.29	.05	1.000	1.29	III	
					9		1.18	.03	1.000	1.18		
1514+00	+00.56	MSH 6 DA378	15 14 7.6	+00 25 42	8		1.73	.04	1.058	1.83	E3/QSO	E 13.9M Z=.053;QSO18.8M (12)(47) COMPLEX S.
1523+03	+03.33		15 23 18.7	+03 18 48	8		1.14	.03	1.000	1.14		19.5M E 0.5'NP.PREV.
					9		1.13	.03	1.000	1.13		IDENT.REVOKED
1523-01	-01.37		15 23 56.6	-01 44 18	8	45	.40	.02	1.000	.40	III	
1523-034			15 23 57.3	-03 27 42	8	45	.21	.01	1.000	.21	III	
1525-020			15 25 48.5	-02 3 0	8	45	.27	.02	1.000	.27	III	
1532+01			15 32 20.5	+01 40 48	8	45	1.08	.04	1.000	1.08		BSO 1.0'S.
1532-000			15 32 58.9	-00 1 18	8	45	.30	.02	1.000	.30	III	
1535+004			15 35 43.2	+00 28 48	8	45	.96	.04	1.000	.96	III	
					11		1.04	.03	1.000	1.04		
1538+010	+00.57		15 38 43.0	+01 0 24	8	45	.41	.02	1.000	.41	III	
1539-022	-02.65		15 39 2.2	-02 13 18	8	45	.25	.01	1.000	.25	III	
1543+01	+01.45	MSH13	15 43 2.3	+01 59 12	8	45	.51	.02	1.000	.51	E 18.5M	(5) PKS 1542+02
1543+005			15 43 37.2	+00 35 30	8	45	1.31	.05	1.000	1.31	QSO?19M	DW 1543+00
1545-004	-00.61		15 45 49.6	-00 25 18	8	45	.19	.01	1.000	.19	III	
1546+027			15 46 57.2	+02 45 54	8	45	1.36	.05	1.000	1.36	QSO?17.5M	
					9		1.10	.03	1.000	1.10		
1547+032			15 47 51.0	+03 12 0	8	135	.26	.01	1.000	.26		FAINT BSO 0.5'N.
1548+013	+01.46		15 48 3.9	+01 20 42	8	45	.26	.01	1.000	.26	III	
1552-033			15 52 51.4	-03 18 18	8	45	.43	.02	1.000	.43	III	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ FLUX DENSITY PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIF-ICATION	REMARKS
1555+001		DA393	15 55 16.9	+00 6 30	8	45	1.93	.07	1,000	1.93	III	DW 1555+00
					9		2.05	.05	1.000	2.05		
1556+032			15 56 59.6	+03 13 18	8	45	.46	.02	1,000	.46		BSO 0.5'S.
1557-00			15 57 26.2	-00 29 6	8	45	.54	.02	1,000	.54	III	
1559+02	+02.41	3C327 MSH 1	15 59 55.7	+02 6 12	8		4.42	.08	1.136	5.02	D 16.5M	Z=.1041 (2)(19)(32)
					9		4.46	.10	1.136	5.07		
1601-015			16 01 14.0	-01 31 0	8	45	.34	.02	1,000	.34	III	
1601-00	-00.63		16 01 18.4	-00 22 0	8	45	.45	.02	1,000	.45	N 17.5M	
1601-017			16 01 43.5	-01 47 12	8	45	.31	.02	1,000	.31	E 19.1M	
1602+01	+01.48	MSH 2	16 02 12.5	+01 25 54	8		2.14	.05	1,000	2.14	IIIA	3C 327.1
					9		2.13	.05	1.000	2.13		
1602-00		DA397	16 02 24.0	-00 11 30	8	45	.49	.02	1,000	.49	QSO 17.5M	(33).PKS 1602-00.2
					9		.60	.02	1.000	.60		
1603+005			16 03 12.6	+00 33 48	8	45	.66	.03	1.000	.66	IIIA	BSO NEAR POSITION
1603+00	+00.58	MSH 3 DA400	16 03 39.0	+00 8 29	8		1.51	.04	1.000	1.51	E4 16.5M	(53)(3)
					9		1.50	.04	1,000	1.50		
1608-011			16 08 14.7	-01 6 6	8	45	.31	.02	1,000	.31		BSO 0.7'P.
1611-007	-00.64	MSH 4	16 11 53.1	-00 47 54	8	45	.27	.01	1,000	.27	QSO?18.5M	
1615+029			16 15 18.4	+02 54 6	8	45	.74	.03	1,000	.74	QSO 18M	
1616-029			16 16 30.1	-02 57 24	8	45	.40	.02	1,000	.40	E 16.6M	
1617-030			16 17 45.8	-03 4 24	8	45	.40	.02	1,000	.40	III	
1618+007			16 18 15.7	+00 43 54	8	45	.21	.01	1,000	.21	QSO?18.5M	
1635-035			16 35 38.7	-03 34 24	8	45	.51	.02	1,000	.51	III	
1636-03	-03.61	DA418	16 36 17.0	-03 7 42	8		.48	.02	1,000	.48	G 19.9M	17.6M DB (8) REVOKED
					9		.42	.01	1,000	.42		

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1638-025	-02.69		16 38 1.4	-02 34 6	8		1.04	.03	1.000	1.04	III	
					9		1.02	.03	1.000	1.02		
1643+022	+02.42		16 43 10.0	+02 17 18	8	45	1.22	.05	1.000	1.22	E 18.0M	
					9		1.13	.03	1.000	1.13		
1645+027	+02.43		16 45 57.9	+02 47 36	8	45	.50	.02	1.000	.50	III	
1646+003	+00.59		16 46 48.5	+00 21 0	8	45	.33	.02	1.000	.33	III	
1648+015			16 48 31.7	+01 34 0	8	45	.72	.03	1.000	.72	III	
1649-039			16 49 28.1	-03 55 30	8	45	.50	.02	1.000	.50	III	
1650+004	+00.60		16 50 22.3	+00 24 6	8	45	.73	.03	1.000	.73	III	
1650+024	+02.44		16 50 29.5	+02 29 36	8	45	.30	.02	1.000	.30	G 14M?	(51).PEC.GAL.NGC 6240 Z=.026
1654-020	-01.39		16 54 18.2	-02 2 12	8	45	.64	.03	1.000	.64	III	
1659+01	+00.62		16 59 20.7	+01 4 24	8	45	.28	.02	1.000	.28	III	
1701+024			17 01 35.5	+02 26 18	8	45	.33	.02	1.027	.34	III	
1704+001	+00.64		17 04 46.8	+00 7 12	8	45	.42	.02	1.000	.42	III	
1705+018			17 05 2.1	+01 52 48	8	45	.52	.02	1.000	.52		BSO NEAR POSITION
					11		.54	.02	1.000	.54		NO UV EXCESS
1706+006			17 06 9.7	+00 39 12	8	45	.50	.02	1.000	.50		BSO NEAR POSITION NO UV EXCESS
1706-02	-02.72		17 06 10.1	-02 52 12	8	45	.29	.02	1.000	.29	III	
1707-038			17 07 36.4	-03 52 30	8	45	.30	.02	1.000	.30	III	
1708+00	+00.65		17 08 .1	+00 40 18	8	45	.83	.03	1.000	.83	DB 21.0M	(5)
1710-029			17 10 54.7	-02 55 12	8	45	.33	.02	1.000	.33	IIIA	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1711+006	+00.66		17 11 32.2	+00 38 42	8	45	.68	.03	1.000	.68		BSO NEAR POSITION NO UV EXCESS
1712-03	-03.62	MSH 4	17 12 22.4	-03 17 54	8	45	.61	.03	1.000	.61	III	
1714-019			17 14 3.3	-01 57 18	8	45	.40	.02	1.000	.40		BSO NEAR POSITION NO UV EXCESS
1714+025		OT024	17 14 25.5	+02 35 36	8	45	.34	.02	1.000	.34	III	
1714-020	-02.73	DA433	17 14 44.8	-02 1 48	8	45	.30	.02	1.000	.30	IIIA	
1716+006			17 16 48.4	+00 40 24	8	45	1.31	.05	1.000	1.31	III	DW 1716+00
					9		1.29	.03	1.000	1.29		
1717-00	-00.67	3C353 MSH 6	17 17 53.3	-00 55 50	8		30.93	1.42	1.063	32.88	D 16.6M	Z=.0307 (34)(50)(32)
					9		32.64	.72	1.063	34.70		
1720+001			17 20 .8	+00 6 36	8	45	.51	.02	1.000	.51	III	DW 1720+00
1721-02	-02.74		17 21 59.9	-02 39 42	8		1.47	.04	1.023	1.50		G 1.5'SF.PKS 1722-02
					9		1.50	.04	1.023	1.53		
1726-038	-03.64		17 26 9.8	-03 48 30	8	45	.57	.02	1.000	.57	IIIA	
1728+004			17 28 .4	+00 26 30	8	45	.18	.01	1.000	.18	III	
1729+010	+01.52		17 29 48.4	+01 2 0	8	45	.20	.01	1.000	.20	QSO? 19M	
1735+026			17 35 2.1	+02 38 36	8	45	.26	.01	1.000	.26	III	
1735-010	-00.69		17 35 7.4	-01 0 24	8	45	.26	.01	1.000	.26	III	
1735+034	+03.37	OT059	17 35 18.3	+03 27 30	8	45	.80	.03	1.000	.80	III	
1738+032			17 38 8.0	+03 13 30	8	45	.27	.02	1.000	.27	III	
1741-03			17 41 20.0	-03 48 48	8	45	3.05	.11	1.000	3.05	IIIA	
					9		2.80	.05	1.000	2.80		
					11		2.99	.08	1.000	2.99		
1748+031	+03.38	OT080	17 48 6.8	+03 11 36	8	45	.80	.03	1.000	.80	III	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ FLUX DENSITY PEAK FLUX DENSITY F.U.	(9) R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1749+023	+02.45		17 49 29.7	+02 20 24	8	45	.55	.02	1.000	.55	III	
1938-012	-01.49		19 38 21.7	-01 12 6	8	45	.57	.02	1.000	.57	IIIC	
1942+038	+03.46		19 42 7.2	+03 49 36	8	45	.50	.02	1.000	.50	QSO?17.5M	
1943+002	+00.73		19 43 45.3	+00 13 0	8	45	.87	.03	1.000	.87	IIIC	
					9		.82	.02	1.000	.82		
1946+024	+02.49		19 46 36.2	+02 29 36	8	45	.42	.02	1.000	.42	IIIC	
1949+02	+02.50	3C403 MSH10	19 49 44.6	+02 22 37	8		3.61	.09	1.023	3.69	SO 16.4M	Z=.0590 (43)(50)(41)
					9		3.60	.08	1.023	3.68		
1949-01	-01.51		19 49 55.2	-01 25 7	8	45	.78	.03	1.089	.85	E 17.5M	(6)(50) . 3C 403.1
					9		.70	.02	1.089	.76		
1952+017	+01.61		19 52 41.1	+01 46 6	8	45	.54	.02	1.000	.54	IIIC	
1952+007	+00.74		19 52 50.2	+00 42 12	8	45	.34	.02	1.000	.34	QSO?18.5M	POSSIBLE UV EXCESS
1953+035	+03.47		19 53 8.1	+03 35 48	8	45	.29	.02	1.000	.29	QSO? 18M	
1957-013	-01.52		19 57 30.1	-01 18 42	8	45	.46	.02	1.000	.46		BSO NEAR POSITION NO UV EXCESS
2001+00	+00.75		20 01 3.3	+00 19 6	9		.24	.01	1.000	.24	IIIC	PKS 2000+00
2001-023	-02.78		20 01 56.0	-02 18 0	9		.38	.01	1.000	.38	III	
					11		.38	.02	1.000	.38		
2003-025	-02.79		20 03 32.4	-02 32 6	5	45	1.52	.06	1.000	1.52		BSO NEAR POSITION
					9		1.45	.03	1.000	1.45		NO UV EXCESS
2012+01	+00.76	OW020	20 12 2.6	+01 5 18	5	45	.43	.02	1.000	.43	IIIC	
2012-017			20 12 39.5	-01 46 42	5	45	.72	.03	1.000	.72	QSO 17.5M	
2022+031			20 22 38.5	+03 7 12	9		.37	.01	1.000	.37	III	
					11		.35	.01	1.000	.35		

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ FLUX PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	DENSITY SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
2027-035			20 27 31.0	-03 35 30	9		.23	.01	1.000	.23	III	
2034+039	+04.70	OW058 MSH 5	20 34 23.3	+03 59 36	9		.20	.01	1.000	.20	III	
2037-02	-03.72	MSH 8	20 37 34.6	-02 58 24	9 11		.30 .30	.01 .01	1.000 1.000	.30 .30	IIIA	PKS 2037-03
2038-01	-01.54		20 38 38.7	-01 22 18	9		.22	.01	1.000	.22	III	
2044-02	-02.80	MSH 9 DA524	20 44 33.8	-02 47 36	5 9		1.38 1.39	.04 .03	1.000 1.000	1.38 1.39	III	
2047-032			20 47 59.7	-03 17 12	5	45	.39	.02	1.000	.39	III	
2047+039		MSH11 OW080	20 47 34.7	+03 56 36	5	45	.47	.02	1.000	.47	III	
2052+005			20 52 14.9	+00 30 30	5	45	.47	.02	1.000	.47	III	
2056+028		OW095	20 56 33.6	+02 52 36	5	45	.43	.02	1.000	.43	III	
2058+019	+01.64	OW097	20 58 38.1	+01 54 6	11		.32	.01	1.000	.32	III	
2059+034			20 59 8.8	+03 29 48	5	45	.59	.03	1.000	.59	QSO 18M	
2108+039	+03.50	OX014	21 08 42.5	+03 58 54	9 11		.37 .36	.01 .02	1.000 1.000	.37 .36	III	
2110-017	-01.55		21 10 13.1	-01 46 24	9		.31	.01	1.000	.31	QSO?19.5M	POSSIBLE UV EXCESS
2110+023		OX018	21 10 48.8	+02 18 6	9		.34	.01	1.000	.34		FAINT BSO 1.0'P.
2121-01			21 21 2.7	-01 25 36	5	45	.60	.03	1.000	.60		BSO 1'F.(PREVIOUS IDENT.(12))
2121+028	+02.52	OX0352	21 21 9.9	+02 52 12	5	45	.32	.02	1.000	.32		FAINT G 0.6'S.
2123+00	+00.79	OX040	21 23 11.3	+00 43 18	5	45	.38	.02	1.000	.38	DB	17.5M+18.3M.(17)

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX DENSITY R.M.S. ERROR F.U.	(9) SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIF-ICATION	(12) REMARKS
2123-015			21 23 56.1	-01 32 42	9		.30	.01	1.000	.30		TWO FAINT BSO'S. NO UV EXCESS
2126+010			21 26 17.8	+01 1 30	9		.27	.01	1.000	.27		16M DB 1'N.OX043?
2131-021	-02.81	MSH11	21 31 33.5	-02 6 36	5	45	1.98	.07	1.000	1.98	QSO 19M	
					11		1.87	.05	1.000	1.87		
2133+010	+01.66	OX055	21 33 18.8	+01 4 48	5	45	.56	.02	1.000	.56	QSO?20M	POSSIBLE UV EXCESS
2134+004		DA553	21 34 4.2	+00 28 18	9		7.60	.17	1.000	7.60	QSO 17M	Z=1.94 (48)
		OX057			11		7.58	.20	1.000	7.58		
2136+021		OX060	21 36 19.9	+02 6 42	9		.25	.01	1.000	.25		BSO NEAR POSITION NO UV EXCESS
2139+02	+02.53	MSH 7 OX066	21 39 38.2	+02 48 36	5	45	.63	.03	1.000	.63	III	
2150-031	-03.75		21 50 1.5	-03 8 36	9		.30	.01	1.000	.30	G 19.6M	
2154-01	-01.57	MSH18	21 54 13.7	-01 39 54	5	45	.73	.03	1.000	.73	III	
					9		.74	.02	1.000	.74		
2201-006	-00.79		22 01 23.7	-00 36 18	7	45	.33	.02	1.000	.33	III	
2202-003	-00.80		22 02 40.8	-00 19 6	8	45	.26	.01	1.000	.26	III	
2207+020	+02.54	MSH 1 OY011	22 07 .2	+02 4 18	7	90	.44	.02	1.000	.44		BSO NEAR POSITION NO UV EXCESS
2210+01	+01.69	DA575	22 10 5.6	+01 38 6	7		1.77	.05	1.000	1.77	IIIB	
		OY016			9		1.80	.04	1.000	1.80		
2211-035	-03.77		22 11 58.1	-03 33 0	7	45	.43	.02	1.000	.43	III	
2214-035	-03.78		22 14 37.5	-03 35 24	8	45	.31	.02	1.000	.31	III	
2215-027			22 15 10.9	-02 47 36	7	45	.43	.02	1.000	.43		FAINT BSO NEAR POSN.
2215+02		OY026	22 15 14.7	+02 5 18	7	45	.70	.03	1.000	.70	III	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION (1950) R.A.	DEC.	RUN	PA	2700 MHZ PEAK FLUX DENSITY F.U.	FLUX DENSITY R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
2215-000	-00.81		22 15 53.6	-00 3 6	8	45	.28	.02	1.000	.28	III	
2216-03	-03.79	MSH 6	22 16 16.3	-03 50 43	7	45	1.05	.04	1.000	1.05	QSO 16.9M	Z=.901 (6)(11)(28)
					8	45	1.00	.03	1.000	1.00		
					9		1.06	.03	1.000	1.06		
					11		1.09	.03	1.000	1.09		
2217-011		MSH 7	22 17 10.5	-01 6 6	8	45	.28	.02	1.000	.28	G 20.2M	
2217+018	+01.70	OY030	22 17 57.6	+01 49 54	7	45	.50	.02	1.000	.50	III	
2219-030	-03.80		22 19 47.2	-03 5 6	7	45	.81	.03	1.000	.81	III	
					9		.81	.02	1.000	.81		
2221-02	-02.83	3C445 MSH 9	22 21 15.5	-02 21 48	7		2.47	.07	1.400	3.46	N 17.5M	Z=.0568 (31)(32)
2224+006	+00.81	OY041	22 24 13.6	+00 36 48	7	45	.44	.02	1.000	.44	III	
2229+029		OY051	22 29 54.3	+02 55 36	8	45	.26	.02	1.000	.26	III	
2243-03	-03.81		22 43 36.0	-03 16 24	8	45	.70	.03	1.000	.70	G 21.0M	VERY BLUE.(8)
					9		.63	.02	1.000	.63		
2244-002			22 44 57.1	-00 16 12	8	45	.25	.02	1.000	.25		BSO NEAR POSITION NO UV EXCESS
2245-022		MSH16	22 45 24.4	-02 13 54	8	45	.34	.02	1.000	.34	III	
2245+029		OY077	22 45 24.6	+02 55 0	8	45	.66	.03	1.000	.66	III	
2250+03	+03.55	OY083 MSH11	22 50 11.7	+03 28 36	11		.24	.01	1.000	.24	III	
2250+003	+00.83	OY084	22 50 21.4	+00 22 0	8	45	.50	.02	1.000	.50	III	
2250+023		OY086	22 50 46.6	+02 20 24	8	45	.34	.02	1.000	.34	III	
2251+006		MSH12 OY087	22 51 33.7	+00 39 12	8	45	.30	.02	1.000	.30	III	
2252+021	+02.56	OY088	22 52 18.6	+02 9 30	8	45	.27	.02	1.000	.27	III	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5)	(6) RUN	(7) PA	(8) 2700 MHZ FLUX PEAK FLUX DENSITY F.U.	(9) R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
2254+024			22 54 43.9	+02 27 12		8	45	.46	.02	1.000	.46	QSO 18M	Z=2.09 (10).OY091.3
2256+017			22 56 24.4	+01 47 30		8	45	.36	.02	1.000	.36		BSO ON POSITION NO UV EXCESS
2300-013			23 00 15.7	-01 21 6		8	45	.19	.01	1.000	.19	III	
2302-025	-02.87	MSH 1	23 02 24.7	-02 35 12		8	45	.25	.01	1.000	.25	III	
2303-008	-01.59	MSH 3	23 03 10.5	-00 52 18		8	45	.33	.02	1.000	.33	III	
2304+00	+00.84	DA592 OZ007	23 04 9.1	+00 40 48		8	45	.31	.02	1.000	.31	III	
2305+02	+02.57	OZ010	23 05 43.2	+02 12 48		8	45	.32	.02	1.000	.32	III	
2305+033		OZ011	23 05 51.3	+03 20 36		8	45	.27	.02	1.000	.27	IIIB	
2313+01	+01.74	OZ023	23 13 43.9	+01 12 36		8	45	.58	.02	1.000	.58	G 19.4M	(33)
2314+03	+03.57	3C459 MSH 5	23 14 2.3	+03 48 56		8 9		2.36 2.43	.05 .06	1.000 1.000	2.36 2.43	N 18.7M	Z=.2205 (27)(50)(46) PKS 2313+03
2318+02	+02.58	OZ030	23 18 13.3	+02 40 36		8	45	.38	.02	1.000	.38	QSO 19M	(17)
2320-021			23 20 30.1	-02 7 0		8	45	.33	.02	1.000	.33	QSO 19.5M	
2320-035			23 20 56.6	-03 33 6		8	45	.42	.02	1.000	.42		BSO NEAR POSITION NO UV EXCESS
2323-038			23 23 18.8	-03 52 24		8		.23	.01	1.000	.23	III	
2324-02		MSH11 DA602	23 24 19.4	-02 18 44		8 9		1.55 1.50	.03 .04	1.022 1.022	1.58 1.53	E 18.0M	(6)(3)
2332-017			23 32 45.2	-01 47 48		8	45	.64	.03	1.000	.64	QSO 18.5M	
2335-027			23 35 22.7	-02 47 36		8	45	.60	.02	1.000	.60	QSO 19M	
2335+03	+03.59	OZ061	23 35 33.8	+03 10 24		8	45	.93	.04	1.000	.93	III	

1971AuJPA..19....1W

TABLE 4

2700 MHZ SURVEY - +4 TO -4 DEG.DEC. ZONE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION R.A.	(1950) DEC.	RUN	PA	2700 MHZ FLUX DENSITY PEAK FLUX DENSITY F.U.	R.M.S. ERROR F.U.	SIZE FACTOR	FLUX DENSITY F.U.	IDENTIFICATION	REMARKS
2338-002	-00.83	MSH15	23 38 26.0	-00 12 18	8	45	.38	.02	1.000	.38	DB 17.2M	
					9		.37	.01	1.000	.37		
					11		.38	.02	1.000	.38		
2338+000			23 38 34.7	+00 2 6	8	45	.34	.02	1.000	.34	E 19.1M	
					9		.37	.01	1.000	.37		
2338+03	+03.60	OZ066	23 38 56.3	+03 1 0	8	45	.38	.02	1.000	.38	G 20.2M	
2340-036			23 40 22.3	-03 39 48	8	45	.28	.02	1.000	.28	QSO 17M	
2347-02	-02.90		23 47 51.0	-02 41 12	8	45	.93	.04	1.000	.93	IIIB	
2349-01	-01.61	MSH20	23 49 22.3	-01 25 54	8	45	1.05	.04	1.000	1.05	N 17.1M	Z=.173 (7)(3)(47)
					9		.97	.02	1.000	.97		
					11		1.04	.03	1.000	1.04		
2351-006			23 51 35.3	-00 36 18	8	45	.51	.02	1.000	.51		BSO NEAR POSITION NO UV EXCESS
2354-02	-02.91		23 54 31.9	-02 43 18	2	135	.46	.02	1.000	.46	III	
2355-010	-00.85		23 55 51.5	-01 1 36	2	135	.42	.02	1.000	.42	III	

References for Tables 4 and 5

1. Bolton (personal communication); 2. Bolton (1960); 3. Bolton (1968); 4. Bolton *et al.* (1965); 5. Bolton and Ekers (1966*a*); 6. Bolton and Ekers (1966*b*); 7. Bolton and Ekers (1966*c*); 8. Bolton and Ekers (1967); 9. Bolton and Kinman (1966); 10. Bolton, Kinman, and Wall (1968); 11. Bolton *et al.* (1966); 12. Bolton, Shimmins, and Merkelijn (1968); 13. Bolton and Wall (1969); 14. Burbidge (1966); 15. Burbidge (1967); 16. Burbidge and Kinman (1966); 17. Clarke, Bolton, and Shimmins (1966); 18. Gent, Adgie, and Crowther (1969); 19. Griffin (1963); 20. Hazard, Mackey, and Nicholson (1964); 21. Hazard, Mackey, and Shimmins (1963); 22. Humason, Mayall, and Sandage (1956); 23. Jefferys (1964); 24. Kinman (personal communication); 25. Kinman *et al.* (1967); 26. Kinman and Burbidge (1967); 27. Longair (1965); 28. Lynds (1967); 29. Lynds *et al.* (1966); 30. Maltby, Matthews, and Moffet (1963); 31. Matthews (quoted from Schmidt 1965); 32. Matthews, Morgan, and Schmidt (1964); 33. Merkelijn (1969); 34. Mills (1960); 35. Mills, Slee, and Hill (1958); 36. Minkowski (1958); 37. Moffet (quoted from Schmidt 1965); 38. Moffet *et al.* (1967); 39. Sandage (1966); 40. Sandage (1967); 41. Sandage (quoted from Petrosian 1969); 42. Sandage, Véron, and Wyndham (1965); 43. Sandage and Wyndham (1965); 44. Schmidt (personal communication); 45. Schmidt (1963); 46. Schmidt (1965); 47. Searle and Bolton (1968); 48. Shimmins *et al.* (1968); 49. Smith and Hoffleit (1963); 50. Véron (1966); 51. Whiteoak (personal communication); 52. Wills (1967); 53. Wyndham (1965); 54. Wyndham (1966).

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5)	(6) RUN	(7) PA	(8) 2700 MHZ FLUX PEAK FLUX DENSITY F.U.	(9) R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
0038-020			00 38 23.8	-02 2 42		5	135	.610	.030	1.000	.610	QSO 18.5M	Z=1.176 (1) NOT IN SELECTED AREA
0038-019	-02.4	DA20	00 38 49.2	-01 59 18		5		.650	.020	1.000	.650	S 15.0M	
0039-020			00 39 48.7	-02 1 0		5	00	.073	.011	1.000	.073	III	
0040+031		0B067	00 40 13.3	+03 10 42		5	135	.146	.012	1.000	.146	IIIB	
0040+017			00 40 15.1	+01 46 0		5	135	.117	.011	1.000	.117	N 18.7M	
0040-005			00 40 51.5	-00 32 0		5	135	.064	.011	1.000	.064		BSO WITH UV EXCESS 2'NP.
0041+001			00 41 1.9	+00 7 54		5	135	.076	.011	1.000	.076	QSO 19 M	
0041+007		0B069	00 41 29.5	+00 45 24		5	135	.212	.013	1.000	.212		17.5M G 1.5'SP.
0041-000	-00.4		00 41 54.7	-00 1 36		5	135	.075	.011	1.000	.075		FAINT BSO NEAR POSITION. NO UV EXCESS
0041+015			00 41 57.6	+01 35 30		5	135	.065	.011	1.000	.065	G 19.5M	
0043+000	-00.5		00 43 8.0	+00 4 36		5	135	.269	.014	1.000	.269	E 17.8M	
0043-005			00 43 14.5	-00 30 6		5	45	.096	.011	1.000	.096	IIIB	
0043-029			00 43 29.4	-02 54 0		5	135	.108	.011	1.000	.108	IIIB	NOT IN SELECTED AREA
0043-010			00 43 33.2	-01 0 0		5	45	.188	.013	1.000	.188	IIIB	
0043-003			00 43 54.0	-00 21 18		5	135	.100	.011	1.000	.100	G 18.5M	
0044+030			00 44 27.6	+03 3 54		5	135	.089	.011	1.000	.089	III	
0045-009			00 45 29.8	-00 58 42		5	45	.144	.012	1.000	.144	III	
0045-000			00 45 44.7	-00 0 54		5	135	.110	.011	1.000	.110	QSO? 19M	POSSIBLE UV EXCESS
0045-025			00 45 48.0	-02 30 6		5	135	.157	.012	1.000	.157		3 FAINT RED OBJECTS
0045-002			00 45 53.1	-00 14 48		5	45	.087	.011	1.000	.087	III	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX R.M.S. ERROR F.U.	(9) DENSITY SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIF-ICATION	(12) REMARKS
0046+011			00 46 5.7	+01 8 42	5	45	.078	.011	1,000	.078	II	CLUSTER OF GALS.
0047+006			00 47 6.5	+00 41 54	5	135	.091	.011	1,000	.091	III	
0047+023		OB078	00 47 8.0	+02 20 48	5	135	.319	.016	1,000	.319		18.5M G 1.5'SF.
0047-02	-03.2	MSH14	00 47 11.1	-02 59 12	5	135	.730	.030	1,000	.730	III	NOT IN SELECTED AREA
					8	45	.630	.030	1,000	.630		18M QSO?IDENT.(8)REVOKED
0049+019			00 49 4.6	+01 59 12	5	135	.111	.011	1,000	.111	G 20.2M	
0050-014			00 50 22.0	-01 26 6	5	135	.100	.011	1,000	.100	III	
0051-008			00 51 48.6	-00 49 36	5	135	.137	.012	1,000	.137		17.5M G 1.2'NF.
0052+011			00 52 22.2	+01 6 12	5	135	.078	.011	1,000	.078	S 14.5M	
0052+020			00 52 34.5	+02 3 0	5	45	.060	.011	1,000	.060	III	
0053-016			00 53 28.2	-01 36 24	5		.690	.060	1,027	.709	E 16.4M	PART OF PKS 0053-01
0053-025			00 53 32.3	-02 33 6	5	135	.096	.011	1,000	.096	III	
0053-015			00 53 52.8	-01 32 48	5		.760	.060	1,027	.781	E 16.7M	PART OF PKS 0053-01
0054-011			00 54 24.5	-01 11 18	5	135	.092	.011	1,450	.133		GALS 2.0'NF.
0054-006			00 54 42.8	-00 40 48	5	135	.113	.011	1,000	.113		S 1.4'SP.
0054+006			00 54 53.0	+00 37 42	5	45	.082	.011	1,000	.082	III	
0054+018		OB092?	00 54 53.2	+01 53 12	5	135	.274	.015	1,000	.274	III	
0055-01	-01.5	3C29	00 55 1.4	-01 39 51	5		3.210	.080	1,046	3.358	E0 15.0M	Z=.0450 (6)(50)(40)
		MSH17			9		3.430	.080	1,046	3.588		
0055+015		OB093	00 55 8.3	+01 34 30	5	45	.158	.012	1,000	.158		E4 1.0'NP.0055+015A
0055+038			00 55 35.1	+03 51 6	5	45	.092	.011	1,000	.092		FAINT G 0.8'NP.
0055+015			00 55 45.6	+01 32 54	5	45	.098	.011	1,000	.098	IIIB	0055+015B

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX DENSITY R.M.S. ERROR F.U.	(9) SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIF-ICATION	(12) REMARKS
0055-019			00 55 48.7	-01 57 0	5	45	.076	.011	1.000	.076	III	
0056+024			00 56 20.0	+02 24 12	5	135	.072	.011	1.000	.072	IIIB	
0056-00	-00.6	DA 32	00 56 31.7	-00 9 16	5		1.960	.050	1.000	1.960	QSO 17.3M	Z=.717 (6)(11)(28)
					8		1.780	.050	1.000	1.780		
					9		1.850	.040	1.000	1.850		
0056+020			00 56 45.6	+02 4 18	5	45	.127	.012	1.000	.127	III	
0056+037			00 56 51.5	+03 45 42	5	45	.077	.011	1.000	.077		FAINT RED OBJ.NEAR POSN. NOT IN SELECTED AREA
0056-010			00 56 58.2	-01 2 18	5	135	.093	.011	1.000	.093		18.5M G 1.0'SF.
0057+028			00 57 34.4	+02 48 24	5	135	.065	.011	1.000	.065	QSO 18.5M	OPTICAL VARIABLE
0058-016			00 58 22.8	-01 39 12	5	135	.088	.011	1.000	.088	III	
0058-021			00 58 28.5	-02 8 48	5	135	.065	.011	1.000	.065	III	
0059+017	+01.1	OB099	00 59 41.0	+01 47 36	5	135	.400	.020	1.000	.400	III	
0059+027			00 59 53.1	+02 46 36	5	135	.151	.012	1.000	.151	III	
0100-011			01 00 7.0	-01 6 30	5	135	.078	.011	1.000	.078	G 19.5M	
0100+023			01 00 55.8	+02 19 24	5	135	.128	.012	1.000	.128		19M G 1.0'NP.
0101-025			01 01 14.2	-02 32 18	5	135	.234	.014	1.000	.234	III	
0101-006			01 01 29.6	-00 40 24	5	135	.080	.011	1.000	.080	II	FAINT CLUSTER ON POSN. 16.3M G 1.0'SF.
0101+023			01 01 47.1	+02 23 18	5		.105	.011	1.000	.105	III	
0103-021			01 03 48.6	-02 11 48	5	135	.420	.020	1.000	.420	QSO 19M	
0104-004			01 04 32.4	-00 29 30	5	135	.078	.011	1.000	.078	III	
0105+034			01 05 48.9	+03 25 48	5	135	.181	.012	1.000	.181	IIIB	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0105+025	+02.2		01 05 49.8	+02 33 48	5	135	.122	.011	1.000	.122	III	
0105-008	-01.6		01 05 53.2	-00 53 18	5	135	.730	.030	1.000	.730		BSO NEAR POSITION NO UV EXCESS
0218+007		OD030	02 18 30.9	+00 46 18	3	135	.186	.013	1.000	.186	III	NOT IN SELECTED AREA
0219+013			02 19 33.0	+01 23 48	3	135	.153	.012	1.000	.153	IIIB	NOT IN SELECTED AREA
0219+007			02 19 56.9	+00 46 6	3	135	.103	.012	1.000	.103	III	
0220-029	-02.11		02 20 25.6	-02 56 24	5	135	.219	.013	1.000	.219	III	NOT IN SELECTED AREA
0220-023			02 20 42.3	-02 19 24	3	135	.112	.011	1.000	.112	III	
0222+000			02 22 34.8	+00 3 18	3	135	.142	.012	1.000	.142	QSO 19.0M	
0222-00	-00.12		02 22 35.0	-00 49 6	3	135	.660	.030	1.000	.660	SO 16.5M	(8)
					9		.680	.020	1.000	.680		
0223-023			02 23 2.2	-02 23 42	3	135	.225	.014	1.000	.225	III	
0223+035			02 23 21.6	+03 33 42	3	135	.142	.012	1.000	.142	IIIB	
0223+012			02 23 34.5	+01 16 6	3	135	.240	.014	1.000	.240	QSO 19M	
0223+018		OD039	02 23 41.3	+01 52 0	3	135	.220	.013	1.000	.220	III	
0225+003		OD043	02 25 31.8	+00 18 24	3	135	.141	.012	1.000	.141	III	
0225-014	-01.11		02 25 34.5	-01 29 6	3	135	.300	.020	1.000	.300	QSO 18M	Z=.685 (10)
0227+002			02 27 7.9	+00 12 24	3	135	.131	.011	1.000	.131	III	
0229+034			02 29 42.5	+03 25 30	5	135	.106	.011	1.000	.106	III	
0230-027			02 30 13.0	-02 46 36	3	135	.330	.020	1.000	.330		S 1.4'SP.
0230-022			02 30 58.5	-02 15 54	3	135	.173	.013	1.000	.173	III	
					10		.207	.012	1.000	.207		

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0231+022			02 31 13.3	+02 15 48	5	135	.069	.012	1.000	.069	QSO 17.5M	
0231+016			02 31 26.7	+01 38 42	5	135	.092	.011	1.000	.092	III	
0232-010			02 32 15.5	-01 3 24	5	135	.109	.011	1.000	.109		FAINT G 1.0'NP.
0232-02	-02.12		02 32 59.9	-02 32 24	5	135	.580	.020	1.000	.580	QSO 19M	(33)
0235+017			02 35 5.8	+01 46 54	5	135	.177	.012	1.000	.177	E 14.8M	
0235-019	-02.13		02 35 25.0	-01 57 48	5	135	.224	.013	1.000	.224		BSO NEAR POSITION NO UV EXCESS
0236+02		0D059	02 36 0	+02 21 30	5	45	.293	.015	1.000	.293		TWO 17.5M G'S,0.7'NF. AND 0.7'SP.
0236-015			02 36 45.0	-01 31 54	5	45	.147	.012	1.000	.147		BSO 1.0'NP. POSSIBLE UV EXCESS
0236+026			02 36 37.9	+02 39 24	5	135	.093	.012	1.000	.093	IIIB	
0237-027			02 37 14.5	-02 47 12	5		.400	.010	1.000	.400	QSO 19M	
					8	45	.430	.020	1.000	.430		
					9		.420	.010	1.000	.420		
0238-018	-02.14		02 38 23.3	-01 50 30	5	135	.102	.011	1.000	.102		FAINT BSO 0.3'S. POSSIBLE UV EXCESS
0238-005			02 38 26.0	-00 34 6	5	135	.091	.011	1.000	.091		FAINT BSO 0.5'NP. POSSIBLE UV EXCESS
0239+002			02 39 12.4	+00 13 54	5	135	.147	.012	1.000	.147	S 12.0M	NGC 1055
0239-016			02 39 37.0	-01 41 24	5	135	.128	.011	1.000	.128		BSO 0.3'NF. NO UV EXCESS
0240-00	-00.13	3C71 MSH14	02 40 7.0	-00 13 31	3		3.130	.070	1.000	3.130	SC 9.7M	Z=.00344 (35)(19)(22) SEYFERT G NGC 1068
					5		3.150	.050	1.000	3.150		
					8		3.050	.080	1.000	3.050		
					9		3.140	.070	1.000	3.140		
0240-021			02 40 15.0	-02 10 12	5	135	.122	.011	1.000	.122	QSO?19.5M	WEAK UV.EXCESS. BSO 1.0'F HAS UV EXCESS.

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0240+016		OD068	02 40 47.7	+01 39 18	5	135	.065	.011	1.000	.065	III	
0241-027			02 41 7.5	-02 45 42	5	135	.207	.013	1.000	.207	IIIB	
0241+011			02 41 10.0	+01 8 6	5	135	.122	.011	1.000	.122		NEAR NGC 1073
0241+031			02 41 11.2	+03 8 18	5	135	.082	.011	1.000	.082		FAINT RED OBJ. NEAR POSN.
0241-012			02 41 14.6	-01 15 24	5	135	.107	.011	1.000	.107	IIIB	
0242+028		OD071	02 42 50.5	+02 49 24	5	135	.285	.015	1.000	.285		FAINT RED OBJ. NEAR POSN.
0243+009	+00.9	OD072	02 43 .8	+00 55 54	5	135	.164	.012	1.000	.164	III	
0245+013			02 45 14.6	+01 19 0	5	135	.153	.012	1.000	.153	III	
1151+027			11 51 21.2	+02 42 0	8	45	.160	.012	1.000	.160	III	NOT IN SELECTED AREA
1152-011			11 52 28.8	-01 9 18	8	135	.078	.011	1.000	.078	G 18.3M	NOT IN SELECTED AREA
1154-019			11 54 5.6	-01 56 30	7	45	.112	.011	1.000	.112	III	
1154-038			11 54 13.4	-03 48 30	7	45	.167	.012	1.000	.167	D 15.7M	NOT IN SELECTED AREA
1154-011			11 54 36.6	-01 7 42	7 9	45	.106 .084	.011 .011	1.000 1.000	.106 .084	III	
1155-029			11 55 15.0	-02 56 12	7	45	.233	.013	1.000	.233	III	
1157+026			11 57 2.8	+02 36 24	8	45	.133	.012	1.000	.133	IIIB	
1157+014			11 57 11.7	+01 29 0	8	45	.143	.012	1.000	.143		BSO NEAR POSITION NO UV EXCESS
1157-011			11 57 12.9	-01 8 24	8	45	.086	.011	1.000	.086	III	
1157-008			11 57 47.6	-00 49 12	8	135	.092	.011	1.000	.092	S 11.6M	NGC 4030
1158+007			11 58 50.1	+00 44 54	8	45	.257	.014	1.000	.257	QSO 18.5M	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
1159-036			11 59 39.5	-03 37 30	7	45	.118	.011	1.000	.118	QSO 19.5M	
1159-02	-02.50		11 59 57.5	-02 23 36	5	45	.430	.020	1.000	.430	III	18M G IDENT.(8)REVOKED
1200+016			12 00 14.3	+01 40 36	8	135	.067	.011	1.000	.067	III	
1200-033			12 00 14.9	-03 19 24	7	45	.116	.011	1.000	.116	III	
					8	135	.138	.012	1.000	.138		
1201-026	-02.51		12 01 9.5	-02 38 12	7	45	.143	.012	1.000	.143	QSO? 19M	OPTICAL VARIABLE
					8	45	.158	.012	1.000	.158		
1201-002			12 01 30.1	-00 13 0	10		.193	.013	1.000	.193	G 20.5M	
1201+027			12 01 33.1	+02 42 18	8	135	.152	.012	1.000	.152	E 16.9M	NOT IN SELECTED AREA
					9		.163	.011	1.000	.163		
1203+011			12 03 14.4	+01 10 54	8	45	.126	.012	1.000	.126	QSO 18M	
1203+005			12 03 25.5	+00 34 48	8	45	.073	.011	1.000	.073	III	
1203-001			12 03 40.3	-00 6 0	8	135	.065	.011	1.000	.065	III	
1204-038			12 04 49.1	-03 51 6	8	135	.078	.011	1.000	.078	QSO?	NOT IN SELECTED AREA
1205-008			12 05 9.5	-00 51 0	8	45	.138	.012	1.000	.138	III	
1205+011			12 05 59.8	+01 11 12	8	45	.231	.014	1.000	.231	III	
1206-026			12 06 31.6	-02 40 48	8	45	.143	.012	1.000	.143	III	
					9		.159	.011	1.000	.159		
1207-013			12 07 58.0	-01 20 12	5	45	.370	.020	1.000	.370	DB 19.4M	
					9		.400	.010	1.000	.400		
1208-035			12 08 45.2	-03 33 42	8	45	.082	.011	1.000	.082	G 19.6M	
1209-008			12 09 10.7	-00 48 54	8	135	.075	.011	1.000	.075	III	
1209-033			12 09 49.0	-03 23 18	8	135	.060	.011	1.000	.060		FAINT G 1.0'SP.
1210-010			12 10 39.4	-01 3 24	8	45	.089	.011	1.000	.089	III	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
1211+003			12 11 21.7	+00 22 0	8		.102	.011	1.000	.102	QSO 20M	
1211+00			12 11 24.0	+00 3 48	8	45	.233	.014	1.000	.233		FAINT G 0.3'SP.(33)
1211+024			12 11 33.9	+02 26 6	8	45	.082	.011	1.000	.082	III	
1212-00	-00.48	MSH 7	12 12 14.3	-00 43 36	5	45	.510	.020	1.000	.510	III	
					8	135	.570	.020	1.000	.570		
					9		.540	.020	1.000	.540		
1212-021			12 12 24.3	-02 9 12	8	45	.085	.011	1.000	.085	IIIB	
1212+006	+00.42		12 12 48.3	+00 36 12	8	135	.285	.016	1.000	.285		FAINT BSO 1.0'SP. NO UV EXCESS
1213-023			12 13 33.9	-02 19 48	8	135	.093	.011	1.000	.093	IIIB	
1214-029	-02.52		12 14 36.4	-02 55 24	8	45	.250	.014	1.000	.250	III	
1215-033			12 15 21.1	-03 20 30	8	45	.108	.011	1.000	.108	III	
1215-002			12 15 26.1	-00 13 42	8	45	.286	.015	1.000	.286	III	
					9		.255	.012	1.000	.255		
1215+013			12 15 56.0	+01 19 18	8	45	.104	.011	1.000	.104	III	
1216-010			12 16 2.3	-01 3 12	8	45	.189	.013	1.000	.189	QSO 19.5M	UV NOT MARKED
					9		.226	.012	1.000	.226		
1216-025			12 16 43.7	-02 30 54	8	45	.094	.011	1.000	.094	IIIB	
1217+02			12 17 38.3	+02 20 21	5	45	.470	.020	1.000	.470	QSO 16.5M	Z=.240 (4)(4)(29)
					9		.450	.020	1.000	.450		
					11		.480	.020	1.000	.480		
1218-02	-02.53		12 18 51.5	-02 25 36	5	45	.540	.020	1.000	.540	QSO 20M	OPTICAL VARIABLE (13) NOT IN SELECTED AREA
1219-036			12 19 17.4	-03 40 30	8	45	.087	.011	1.000	.087	III	NOT IN SELECTED AREA

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PKS SOURCE NUMBER	OTHER CATALOGUE NUMBERS 4C	OTHER	POSITION R.A.	(1950) DEC.	RUN	PA	2700 MHZ PEAK FLUX DENSITY F.U.	FLUX R.M.S. ERROR F.U.	DENSITY SIZE FACTOR	FLUX DENSITY F.U.	IDENTIF-ICATION	REMARKS
1328-001			13 28 27.2	-00 9 12	2	135	.090	.010	1.000	.090	III	
1328-034			13 28 51.5	-03 25 42	1		.257	.011	1.000	.257	QSO 19M	
1329+012	+01.38		13 29 43.1	+01 17 30	1		.210	.012	1.000	.210		FAINT BSO ON POSN. NO UV EXCESS
1330+02	+02.36	MSH 7	13 30 20.5	+02 16 9	9		1.820	.040	1.050	1.911	N 19.1M	Z=.2156 (17)(30)(39) 3C287.1
1331+004			13 31 8.6	+00 25 42	1		.140	.011	1.000	.140	QSO 20.0M	
					2	135	.151	.011	1.000	.151		
1331+025			13 31 16.4	+02 34 18	1	135	.145	.012	1.000	.145	QSO 18.5M	
1331-013			13 31 27.7	-01 18 36	2	135	.052	.011	1.000	.052		GALS. NEAR POSITION
1334+008			13 34 59.5	+00 50 54	1	135	.101	.011	1.000	.101	III	
1335+023			13 35 7.3	+02 22 6	2	135	.104	.011	1.000	.104	QSO 17.5M	Z=0.61 (10)
1336+003			13 36 8.8	+00 18 6	1	135	.117	.011	1.000	.117	III	
1336-030			13 36 57.4	-03 0 54	1	135	.190	.013	1.000	.190	III	
					2	135	.208	.014	1.000	.208		
1336+020	+02.37		13 36 58.8	+02 0 36	1	135	.380	.020	1.000	.380	III	
					2	135	.390	.010	1.000	.390		
1336-000			13 36 59.8	-00 1 12	1	135	.132	.012	1.000	.132	QSO 19M	
					2	90	.099	.011	1.000	.099		
1337-013			13 37 30.1	-01 22 18	1	135	.192	.013	1.000	.192	QSO 18.5M	Z=1.607 (1)
1337-033			13 37 38.1	-03 20 12	1	135	.580	.020	1.000	.580	III	
					2	135	.580	.030	1.000	.580		
1338+011			13 38 58.0	+01 7 48	1	135	.160	.013	1.000	.160	G 20.2M	
1339+015			13 39 43.0	+01 32 30	1	45	.172	.012	1.000	.172		BSO ON POSITION
					2	135	.172	.013	1.000	.172		NO UV EXCESS

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
1340+022	+02.38	MSH 9	13 40 16.6	+02 13 0	1	135	.540	.020	1.000	.540	III	
1341+005			13 41 40.3	+00 32 12	1	45	.080	.011	1.000	.080		BSO NEAR POSITION
					2	135	.082	.011	1.000	.082		POSSIBLE UV EXCESS
1342-016			13 42 43.2	-01 41 18	2	135	.224	.014	1.000	.224	D 18.0M	
					11		.208	.012	1.000	.208		
1343-00	-00.51		13 43 3.1	-00 41 48	1	45	.620	.030	1.000	.620	III	17.7M QSO? PREV.IDENT. (8) REVOKED. PKS1342-00
1343-026	-02.58		13 43 17.4	-02 37 42	1	135	.245	.014	1.000	.245	IIIB	
1343+011			13 43 47.8	+01 10 12	1	45	.101	.011	1.000	.101	QSO? 20M	
1344+029			13 44 51.7	+02 55 24	1	45	.149	.012	1.000	.149		BSO 0.7'F. NOT IN SELECTED AREA
1345+008	+00.47		13 45 10.3	+00 50 12	1	135	.139	.012	1.000	.139	III	
					2	135	.176	.013	1.000	.176		
1345+002			13 45 13.5	+00 12 24	2	135	.103	.011	1.000	.103	III	
1346-015			13 46 38.9	-01 31 24	2	135	.089	.011	1.000	.089	III	
1346+018			13 46 58.5	+01 49 18	1	135	.147	.012	1.000	.147	III	
1348-011			13 48 22.3	-01 11 0	2	135	.107	.012	1.000	.107	III	
					11		.105	.011	1.000	.105		
1348+007			13 48 30.6	+00 46 12	2	135	.175	.013	1.000	.175	III	
1349-019			13 49 23.3	-01 55 12	1	45	.139	.012	1.000	.139	III	PART OF 4C-01.30
					2	135	.118	.012	1.000	.118		
1349-01			13 49 49.4	-01 41 24	2	135	.310	.020	1.000	.310	G 19.6M	PART OF 4C-01.30
1349-008			13 49 52.3	-00 53 18	1	45	.137	.012	1.000	.137		G 0.8'NF.
1349+027			13 49 58.2	+02 47 24	1	45	.810	.030	1.000	.810	III	NOT IN SELECTED AREA
					8	45	.770	.030	1.000	.770		DW 1349+02
					9		.720	.020	1.000	.720		

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
1351+003			13 51 19.0	+00 21 0	2	135	.071	.011	1.000	.071	G 20.2M	IN SMALL CLUSTER
1351+021			13 51 22.1	+02 6 54	2	135	.500	.020	1.000	.500		19.5M BSO 0.7'SP.
					8	45	.440	.020	1.000	.440		UV EXCESS
					11		.460	.020	1.000	.460		
1351-018			13 51 32.8	-01 51 18	2	135	1.000	.040	1.000	1.000		FAINT BSO 1.0'NP.
					8	45	.980	.040	1.000	.980		UV EXCESS
					9		.970	.020	1.000	.970		
					11		.990	.030	1.000	.990		
					8	45	.300	.020	1.000	.300		
1352+00			13 52 35.3	+00 55 30	2	135	.400	.020	1.000	.400	QSO?19M	(33)
1353-005	-00.52		13 53 48.4	-00 34 36	2	135	.320	.020	1.000	.320	III	NOT IN SELECTED AREA
					8	45	.310	.020	1.000	.310		
2149-20			21 49 4.7	-20 0 6	3	135	1.230	.050	1.000	1.230	QSO? 19M	NOT IN SELECTED AREA
2149-158		MSH20	21 49 14.7	-15 51 24	3	135	.320	.020	1.000	.320	DB	17.1M+17.3M
												NOT IN SELECTED AREA
2150-202			21 50 57.0	-20 15 12	3		.310	.010	1.000	.310	III	
2151-153			21 51 26.7	-15 18 12	3	135	.430	.020	1.000	.430		FAINT G 0.8'NF.
												NOT IN SELECTED AREA
2152-218			21 52 16.9	-21 50 48	3	135	.186	.013	1.450	.270	III	
2152-213			21 52 59.9	-21 23 0	3	135	.049	.011	1.000	.049		BSO 1.5'NF.
												UV EXCESS
2153-219			21 53 12.7	-21 58 42	3	135	.114	.011	1.000	.114	N 17.2M	
2153-188			21 53 23.8	-18 50 36	3	135	.141	.012	1.000	.141	III	
2153-204			21 53 48.6	-20 26 36	3	135	.220	.014	1.000	.220	QSO 17M	Z=1.31 (47)

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	(5) DEC.	(6) RUN	(7) PA	(8) 2700 MHZ FLUX PEAK FLUX DENSITY F.U.	(9) R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIFICATION	(13) REMARKS
2154-18		MSH23	21 54 13.2	-18 27 54	3		1.080	.040	1.026	1.108	III	16.5M QSO? IDENT.(6) REVOKED
2154-214			21 54 43.3	-21 24 6	3	135	.087	.011	1.000	.087	III	
2154-183			21 54 43.6	-18 21 24	3	135	.990	.040	1.011	1.001	III	
2155-202			21 55 4.7	-20 12 18	3	135	.217	.014	1.000	.217	G 19.6M	
2155-152			21 55 24.0	-15 15 30	3 11	135	1.780 1.560	.070 .040	1.000 1.000	1.780 1.560	III	NOT IN SELECTED AREA
2155-195			21 55 32.9	-19 32 42	3	135	.077	.011	1.000	.077		G 1.5'NP.
2156-203			21 56 3.8	-20 19 48	3	135	.090	.011	1.000	.090		G 1.2'S.
2156-192			21 56 26.3	-19 12 30	3	135	.103	.011	1.000	.103		G 1.0'S.
2156-183			21 56 34.6	-18 22 12	3	135	.090	.011	1.000	.090	QSO 19.5M	
2157-214			21 57 11.1	-21 25 0	3	135	.167	.012	1.000	.167	III	
2157-200			21 57 21.8	-20 0 24	3	135	.133	.012	1.000	.133	QSO 19.5M	OPTICAL VARIABLE
2157-172			21 57 39.4	-17 12 36	3	135	.066	.011	1.000	.066		G 1.3'NF.
2157-191			21 57 54.6	-19 10 6	3	135	.133	.012	1.000	.133	G 20.2M	
2158-160			21 58 4.9	-16 1 30	3	135	.140	.012	1.000	.140	III	
2158-167			21 58 10.8	-16 47 18	3	135	.147	.012	1.000	.147		BSO ON POSITION NO UV EXCESS
2158-206			21 58 41.2	-20 39 48	3	135	.235	.014	1.000	.235		FAINT BSO ON POSN, NOT ON B/UV PLATE
2158-170			21 58 47.1	-17 3 0	3		.178	.012	1.000	.178	III	
2158-17			21 58 54.3	-17 47 36	3	135	.294	.015	1.000	.294	III	
2159-215			21 59 3.7	-21 32 18	3	135	.130	.012	1.000	.130	QSO 19.0M	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5)	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX DENSITY R.M.S. ERROR F.U.	(10) SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
2159-187			21 59 5.3	-18 47 30		3	135	.183	.013	1.000	.183	III	
2159-192			21 59 28.1	-19 16 36		3	135	.169	.012	1.000	.169		G 1,2'S.
2159-205			21 59 30.2	-20 31 54		3	135	.081	.011	1.000	.081	III	
2159-163			21 59 35.0	-16 20 6		3	135	.068	.011	1.000	.068		FAINT G NEAR POSN.
2159-219			21 59 52.7	-21 56 48		3	135	.093	.011	1.000	.093	III	
2159-201			21 59 56.5	-20 9 48		3	135	.200	.013	1.000	.200	III	
2159-186			21 59 58.6	-18 37 12		11	135	.070	.011	1.000	.070	III	
2200-189			22 00 6.1	-18 54 42		3	90	.167	.012	1.000	.167	III	
2200-220			22 00 19.8	-22 3 30		3	135	.077	.011	1.000	.077		2 FAINT BSO'S ON POSN, NOT ON B/UV PLATE
2201-217			22 01 16.4	-21 42 42		3	135	.146	.012	1.000	.146	E+E	16.5M+17.3M IN CLUSTER
2201-184			22 01 37.9	-18 26 30		3	135	.078	.011	1.000	.078	III	
2202-179			22 02 12.8	-17 57 18		3	135	.340	.020	1.000	.340	III	
2203-18		MSH11	22 03 25.8	-18 50 16		3 4 11		5.200 5.200 5.200	.110 .190 .140	1.000 1.000 1.000	5.200 5.200 5.200	QSO 19.5M	(6)(25)
2203-215			22 03 54.9	-21 34 30		3	45	.158	.012	1.000	.158		BSO NEAR POSITION NO UV EXCESS
2204-182			22 04 10.0	-18 15 36		3	45	.340	.020	1.000	.340	III	
2204-20			22 04 31.1	-20 18 36		3	45	.350	.020	1.000	.350	III	
2204-218			22 04 40.2	-21 49 18		3	45	.083	.011	1.000	.083	E 16.8M	
2204-208			22 04 49.3	-20 53 18		3	45	.145	.012	1.000	.145		BSO NEAR POSITION NOT ON B/UV PLATE
2205-178			22 05 16.5	-17 53 6		3	45	.152	.012	1.000	.152	III	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX R.M.S. ERROR F.U.	(9) DENSITY SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIF-ICATION	(12) REMARKS
2207-187			22 07 23.8	-18 45 12	3	45	.079	.011	1.000	.079	III	
2207-203			22 07 33.5	-20 22 6	3	45	.111	.012	1.000	.111		BSO NEAR POSITION NO UV EXCESS
2207-159			22 07 38.1	-15 59 30	3	45	.069	.011	1.000	.069	III	
2209-154			22 09 50.3	-15 26 30	3	45	.077	.011	1.000	.077	QSO?20.0M	NOT IN SELECTED AREA
					4	22	.094	.012	1.000	.094		
2210-210			22 10 40.2	-21 4 18	3	45	.098	.011	1.000	.098	III	
2211-17		3C444	22 11 42.0	-17 16 42	11		4.470	.120	1.010	4.515	D 19M	(51) MSH7
2211-202			22 11 48.2	-20 17 0	3	45	.093	.011	1.000	.093		FAINT G? 0.5'SP.
2212-159			22 12 14.3	-15 58 30	3	45	.255	.014	1.000	.255		G WITH UV EXCESS 2'S. NOT IN SELECTED AREA
2313-167			23 13 31.6	-16 47 6	3	45	.198	.013	1.000	.198	E 18.3M	
2213-200			22 13 34.1	-20 3 48	3	45	.073	.011	1.000	.073	III	
2213-156			22 13 51.5	-15 39 18	3	45	.281	.015	1.000	.281	III	
2214-192			22 14 21.1	-19 16 36	3	45	.075	.011	1.000	.075	III	
2215-206			22 15 3.3	-20 38 12	3	45	.125	.011	1.000	.125	III	
2215-179			22 15 19.3	-17 58 0	3	45	.234	.014	1.000	.234	III	
2215-185			22 15 37.2	-18 35 0	3	45	.104	.011	1.000	.104	III	
2353-003	-00.84		23 53 2.3	-00 19 12	3	135	.163	.012	1.000	.163	III	
2353+028			23 53 16.3	+02 51 0	3	135	.099	.011	1.000	.099	III	
2353+004			23 53 20.2	+00 24 30	3	135	.095	.011	1.000	.095	III	
2353-018			23 53 33.0	-01 48 0	3	135	.118	.012	1.000	.118		E 16M 2.0'NP.
2353+010			23 53 34.1	+01 2 36	3	135	.104	.011	1.000	.104	III	

1971AuJPA..19....1W

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX DENSITY R.M.S. ERROR F.U.	(9) SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIFICATION	(12) REMARKS
2354-02	-02.91		23 54 31.9	-02 43 18	2	135	.459	.020	1.000	.459	III	NOT IN SELECTED AREA
2354+008		0Z091	23 54 37.7	+00 48 30	2	135	.157	.013	1.000	.157		FAINT OBJECT WITH POSSIBLE UV EXCESS
2354-021			23 54 51.1	-02 9 18	2	135	.287	.015	1.000	.287	III	
2355-024			23 55 24.2	-02 28 12	2	135	.151	.012	1.000	.151	III	
2355-010	-00.85		23 55 51.5	-01 1 36	2	135	.423	.019	1.000	.423	III	
2356+023			23 56 2.3	+02 23 48	3	135	.106	.011	1.000	.106	III	
2356+033	+03.61	0Z094	23 56 7.6	+03 20 30	2 3	135 135	.209 .228	.014 .014	1.000 1.000	.209 .228	III	
2356-028	-02.92		23 56 30.0	-02 52 12	3	45	.171	.013	1.000	.171	III	NOT IN SELECTED AREA
2356+030			23 56 30.1	+03 5 54	3	45	.064	.011	1.000	.064		NOT IN SELECTED AREA FAINT G 1.1'NP.
2356+01			23 56 41.3	+01 50 6	2	135	.156	.013	1.000	.156	E4 17.5M	
2356-023			23 56 43.3	-02 21 24	2	135	.108	.011	1.000	.108	III	
2357-007			23 57 4.5	-00 47 54	3	135	.101	.011	1.000	.101	IIIB	
2357+00		0Z095	23 57 24.2	+00 25 30	3	135	.275	.015	1.000	.275	DB 15.6M	(17)
2357-006			23 57 59.3	-00 38 42	3	135	.147	.012	1.000	.147	IIIB	
2358+028			23 58 6.3	+02 51 6	3	135	.073	.011	1.000	.073	III	
2359+017		0Z098	23 59 17.2	+01 46 30	3	135	.174	.012	1.000	.174	IIIB	
2359-012			23 59 36.2	-01 14 18	3	135	.047	.011	1.000	.047	III	
0000-006			00 00 21.8	-00 41 24	2	135	.236	.014	1.000	.236	III	
0000+035		0B001	00 00 44.7	+03 31 18	3	135	.146	.012	1.000	.146	IIIB	
0000-022			00 00 49.2	-02 13 24	3	135	.156	.013	1.000	.156	III	

TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(5) RUN	(6) PA	(7) 2700 MHZ PEAK FLUX DENSITY F.U.	(8) FLUX DENSITY R.M.S. ERROR F.U.	(9) SIZE FACTOR	(10) FLUX DENSITY F.U.	(11) IDENTIFICATION	(12) REMARKS
0001+037			00 01 6.8	+03 43 48	3	135	.125	.012	1.000	.125	III	NOT IN SELECTED AREA
0003-008			00 03 12.2	-00 51 24	3	135	.073	.011	1.000	.073		18M G 1.1'SF.
0003+006		0B005	00 03 30.3	+00 37 12	2	135	.248	.015	1.000	.248	G 18.3M	
0003-00	-00.1	3C2 MSH 1	00 03 48.7	-00 21 6	2		2.400	.040	1.000	2.400	QSO19.5M	Z=1.037 (42)(42)(26)
					3		2.430	.050	1.000	2.430		OPTICAL VARIABLE(42)
					9		2.400	.050	1.000	2.400		
0004-000			00 04 42.2	-00 1 12	3	135	.065	.011	1.000	.065		17.5M G 1.1'NP.
0004-010			00 04 56.9	-01 5 12	3	135	.088	.011	1.000	.088	E 16.3M	
0005+021		0B009	00 05 10.4	+02 10 12	3	135	.117	.012	1.000	.117		TWO BSO'S.NO UV EXCESS
0005+024			00 05 32.2	+02 28 30	3	135	.066	.010	1.000	.066	III	
0006+021			00 06 6.9	+02 11 24	3	135	.093	.011	1.000	.093	III	
0006-005			00 06 15.2	-00 33 12	11	45	.092	.011	1.000	.092	III	
0006+014			00 06 17.0	+01 25 54	2	135	.094	.011	1.000	.094	QSO 18.5M	
0006-025			00 06 43.0	-02 35 54	3	135	.071	.011	1.000	.071	III	
0007+016		0B014	00 07 23.7	+01 41 6	2	135	.160	.013	1.000	.160	G 20.5M	
0008+009			00 08 3.1	+00 55 30	3	135	.088	.011	1.000	.088	III	
0008-011			00 08 9.0	-01 7 42	3	135	.077	.011	1.000	.077	III	
0008-006			00 08 20.4	-00 36 48	3	135	.106	.011	1.000	.106	III	
0008+034			00 08 36.7	+03 25 30	3	135	.064	.011	1.000	.064	III	NOT IN SELECTED AREA
0008-033			00 08 38.5	-03 18 24	2	135	.182	.013	1.350	.246	III	NOT IN SELECTED AREA
					3	135	.208	.013	1.350	.281		
0008+008		0B015	00 08 52.7	+00 50 48	3	135	.074	.011	1.000	.074	III	
0010+036			00 10 16.8	+03 36 54	3	135	.082	.011	1.000	.082	IIIB	NOT IN SELECTED AREA

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TABLE 5

2700 MHZ SURVEY - SELECTED AREAS

(1) PKS SOURCE NUMBER	(2) OTHER CATALOGUE NUMBERS 4C	(3) OTHER	(4) POSITION (1950) R.A.	DEC.	(6) RUN	(7) PA	(8) 2700 MHZ PEAK FLUX DENSITY F.U.	(9) FLUX R.M.S. ERROR F.U.	(10) DENSITY SIZE FACTOR	(11) FLUX DENSITY F.U.	(12) IDENTIF-ICATION	(13) REMARKS
0010+00	+00.1	3C5 MSH 2	00 10 35.6	+00 34 54	2 9	135	.950 .910	.040 .020	1.000 1.000	.950 .910	III	
0011-023			00 11 50.1	-02 22 30	2	135	.243	.014	1.000	.243	III	
0012+027			00 12 19.6	+02 42 48	3	135	.067	.011	1.000	.067	III	
0012-008			00 12 27.9	-00 51 24	2	135	.120	.012	1.000	.120	E 18.0M	
0013+018			00 13 13.6	+01 49 18	3	135	.087	.011	1.000	.087	III	
0013-00			00 13 36.7	-00 31 48	2 9	135	.870 .900	.030 .020	1.000 1.000	.870 .900		BSO NEAR POSN.NO UV EXC-ESS.PREV.IDENT.(8)REVOKED
0014-010			00 14 3.3	-01 5 6	11	45	.098	.012	1.000	.098	III	
0015-021			00 15 1.5	-02 6 6	3	135	.070	.011	1.000	.070	III	
0015-028			00 15 19.2	-02 53 12	3	135	.073	.011	1.000	.073	III	
0015+000			00 15 43.4	+00 4 0	3	135	.079	.011	1.000	.079	III	
0016-028			00 16 14.1	-02 49 42	3	135	.102	.012	1.000	.102	III	NOT IN SELECTED AREA
0016-013			00 16 51.9	-01 21 30	3	135	.116	.012	1.000	.116	III	
0016-022			00 16 54.4	-02 14 24	3	135	.069	.011	1.000	.069	III	
0017+026			00 17 10.7	+02 41 36	3	135	.142	.012	1.000	.142	IIIB	
0017-008			00 17 33.8	-00 50 36	3	135	.093	.011	1.000	.093	III	
0017-001			00 17 37.3	-00 11 42	3	135	.108	.011	1.000	.108	III	
0017-028	-02.2		00 17 47.2	-02 49 36	3	135	.255	.014	1.000	.255	III	NOT IN SELECTED AREA

References for Tables 4 and 5 appear at the end of Table 4.