

NEW SOUTHERN PLANETARY NEBULAE*

SIDNEY VAN DEN BERGH, RENÉ RACINE, STEVEN VAN AGT,†
 THOMAS BARNES,‡ CHRISTINE COUTTS, BARRY MADORE,
 AND ART SKILL

David Dunlap Observatory, University of Toronto Richmond Hill, Ontario, Canada

Received 1972 August 7

ABSTRACT

Seven new planetary nebulae have been found during a two-color survey of the Southern Milky Way.

Subject heading: planetary nebulae

The Curtis Schmidt telescope on Cerro Tololo was used in 1969–1971 to survey a strip of the southern Milky Way extending from $l^{\text{II}} \approx 250^\circ$ to $l^{\text{II}} \approx 350^\circ$. The average width of this strip was $\sim 12^\circ$. The blue exposures of the survey were mostly on IIa-O emulsion behind a GG13 filter and the red exposures on 098-02 emulsion behind an RG2 filter. Inspection of these plates reveals seven objects that appear to be planetary nebulae and which are not listed in the *General Catalogue of Planetary Nebulae* by Perek and Kohoutek (1967). These new nebulae are listed in table 1. The coordinates

TABLE 1
 NEW PLANETARY NEBULAE

No.	α (1950)	δ (1950)	Diameter	Remarks
1.....	08 ^h 29 ^m 0	–38°10'	50" × 75"	Complex structure
2.....	09 29.7	–56°00'	105 × 115	Complex
3.....	09 39.2	–56 45	30 × 40	Ring shaped
4.....	12 44.6	–63 35	30 × 60	Bright rims
5.....	13 40.9	–60 35	60 × 85	Theta shaped
6.....	14 40.1	–56 05	40 × 50	Ring shaped
7.....	15 51.4	–51 15	95 × 105	Ring shaped

in this table have an accuracy $\sim 5'$. Finding charts for the objects listed in Table 1 are given in figure 1 (plate 12).

This investigation was supported in part by the National Research Council of Canada.

REFERENCE

Perek, L., and Kohoutek, L. 1967, *General Catalogue of Planetary Nebulae* (Prague: Academia Publishing House).

* Based on plate material obtained at the Cerro Tololo Inter-American Observatory. CTIO is operated by the Association of Universities for Research in Astronomy Inc., under contract with the National Science Foundation of the U.S.A.

† Department of Astronomy, University of Nijmegen.

‡ Now at the Department of Astronomy, University of Texas.

PLATE 12

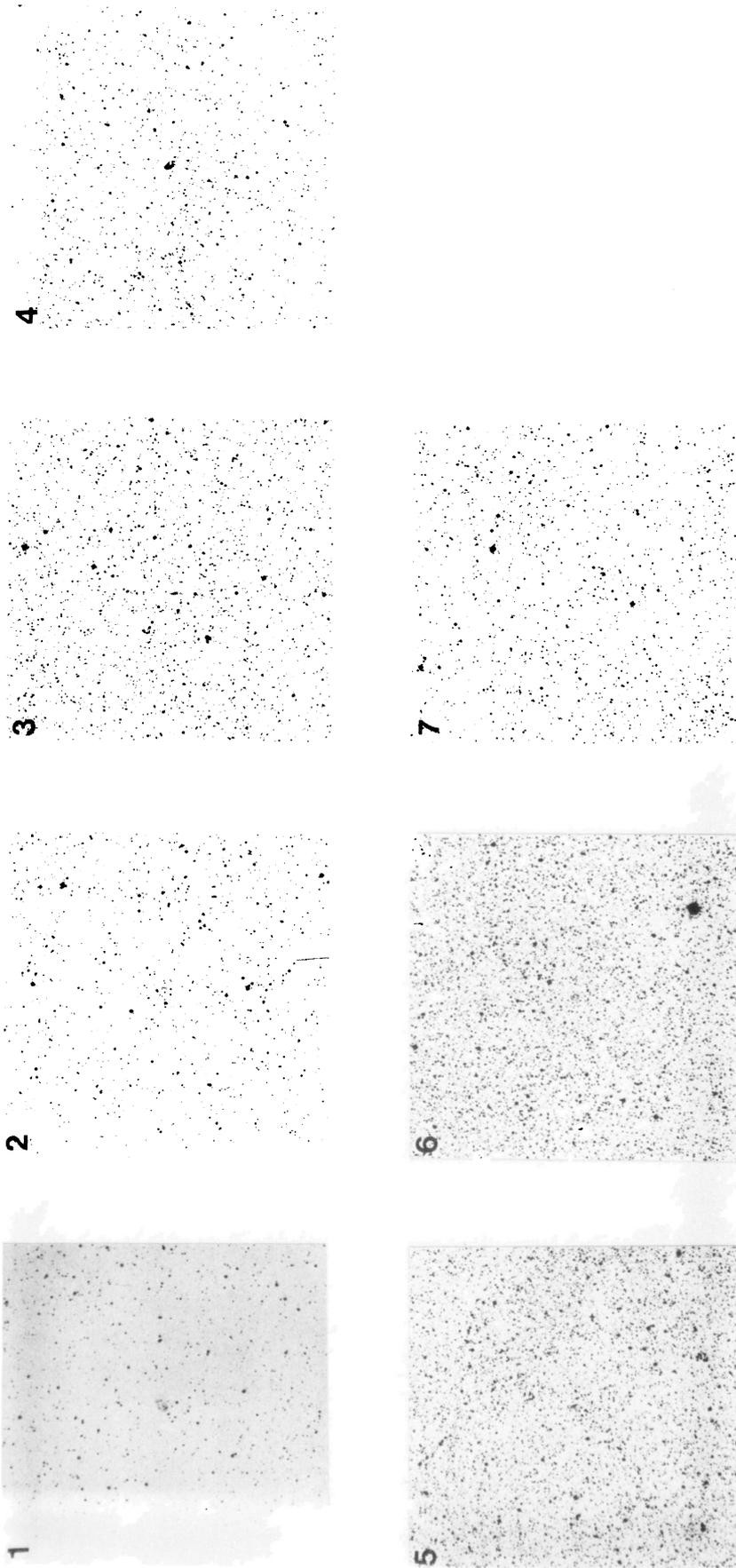


FIG. 1.—Identification charts for new planetary nebulae. Each chart is 30 arc min square. Numbers are located in the NE corner of each chart.
VAN DEN BERGH *et al.* (see page 863)

