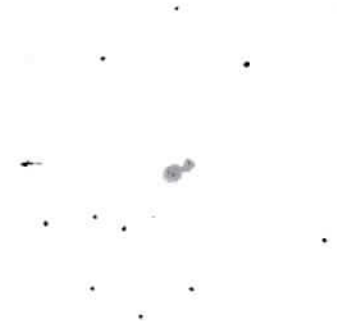


**Figure 42-6. Minkowski 92**
*13″, f4.5–200x, by George de Lange*

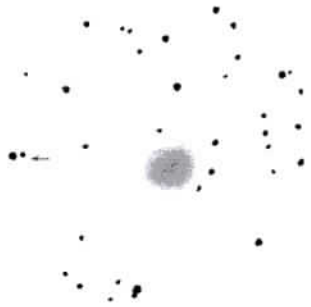


**Figure 42-7. NGC 6842**
*17.5″, f4.5–300x, by G. R. Kepple*

**Figure 42-8. NGC 6856**
*12.5″, f5–200x, by G. R. Kepple*

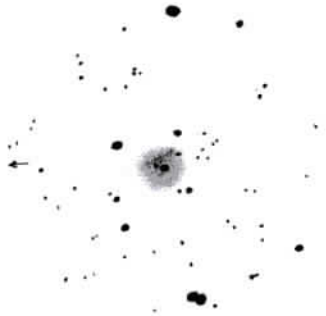
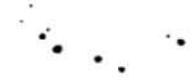


**Figure 42-9. NGC 6857**
*17.5″, f4.5–300x, by G. R. Kepple*

**Figure 42-10. Dolidze 36**
*12.5″, f5–225x, by G. R. Kepple*

**Figure 42-11. Basel 6**
*12.5″, f5–250x, by G. R. Kepple*



**IC 4996 Open Cluster 15★ Tr Type II 3 p n**
**ø5′, m7.3v, Br★ 8.51v** **$20^h16.5^m$ +37°38′**
*Finder Chart 42-6, Figure 42-38* ★★★

*8/10″ Scopes–100x:* IC 4996 is a little cluster 25′ SW of the explosive variable 34 = P Cygni (presently a 5th magnitude object). At the center of a 3′ knot of faint cluster members is the magnitude 7.6 cluster lucida. Immediately to its north is the multiple Burnham 442, the magnitude 8.0 primary of which has a magnitude 9.0 companion 32″ away in P.A. 77° and a magnitude 9.7 companion 19″ distant in P.A. 280°. These four stars form a distinct "trapezium." Faint outlying members are scattered east and north of this knot for a total of 30 stars over a 6′ diameter area. An 8th magnitude star lies 6′ ENE, and a 9th magnitude star is 3′ NNE.

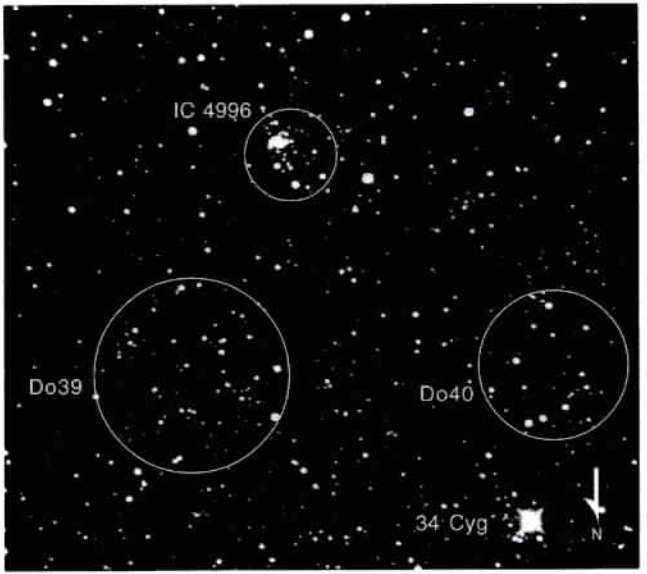



**Figure 42-38.** *IC 4996 (at top) is a compact cluster 25′ SW of 34 Cygni (bottom right) with Dolidze 39 and 40 lying between them. Martin C. Germano made this 35 minute exposure on 2415 film with a 14.5″, f5 Newtonian.*

**NGC 6896 Open Cluster [20★]**
**[ø6′, m –]** **$20^h18.0^m$ +30°39′**
*Finder Chart 42-5, Figure 42-15* ★★★

*12/14″ Scopes–100x:* NGC 6896, though another open cluster classed as "nonexistent" in the RNGC, stands out fairly well against the background Milky Way field. Its brighter stars form a 6′ long arc concave to the SE just NW of a 9th mangitude star. Another dozen or so fainter stars are scattered about. At low power the arc consists of five 12th magnitude stars. 150x resolves the easternmost star of the arc into a knot of four 13th magnitude components

pointing WNW. The southern group contains 15 members in a triangular area, its brighter stars at the south and NW vertices of the triangle. A concentration of very faint stars lies SW of the southern group.

**Dolidze 41 Open Cluster Tr Type IV 1 p**

group. Numerous star-pairs and star-chains make this a visually interesting group.

**NGC 6991 H76[8] Open Cluster 12★**
**Tr Type III 3 p n, ø5′, m – 20[h]56.6[m] +47°25′**
*Finder Chart 42-8* ★★★

*12/14″ Scopes–100x:* NGC 6991 is classified as "nonexistent" and indeed probably is nothing more than an enrichment of the Milky Way background. It lies 8′ east of a 6th magnitude star and contains only a dozen stars in a 5′ area.

**Barnard 352 Dark Nebula**
**ø20′ × 10′, Opacity 5 20[h]57.1[m] +45°54′**
*Finder Chart 42-8* ★★★

*8/10″ Scopes–50x:* Barnard 352, located on the north edge of the North America Nebula, is a well defined, triangular, 20′ × 10′ E–W dark dust cloud. Along its rather indistinct northern edge is an E–W arc of four 9th–10th magnitude stars. A N–S row of five stars is near the dark nebula's SSE corner, where it is at its most opaque and most sharply defined.

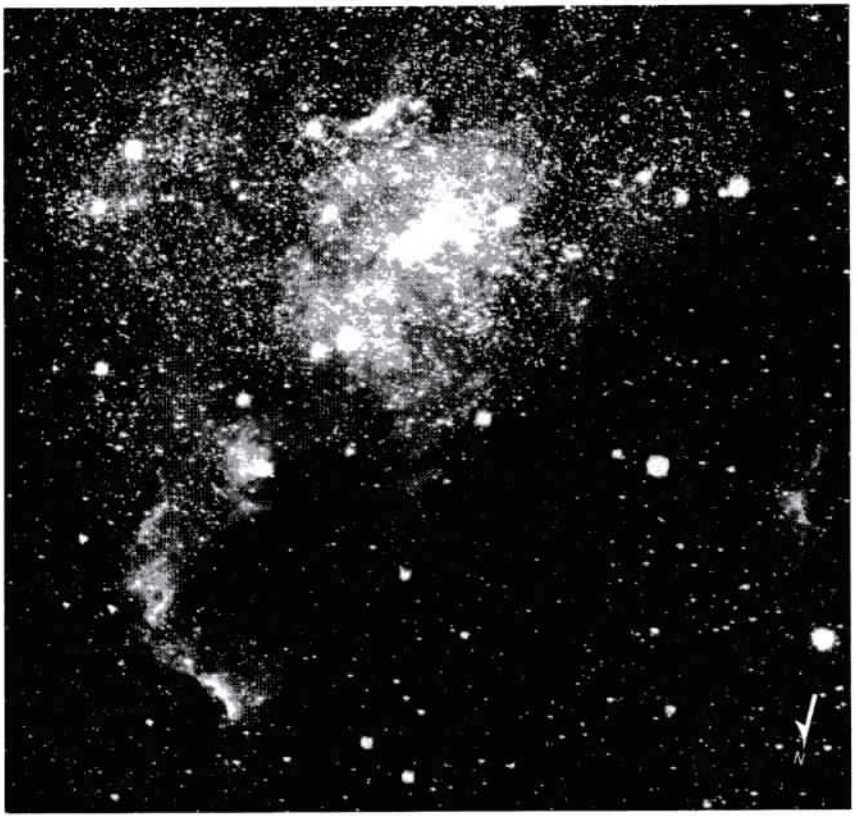



**Figure 42-58.** *NGC 7000, the North America Nebula, and IC 5067-70, the Pelican Nebula to its west (right), are huge faint emission nebulae best seen in binoculars. William Harris made this 60 minute exposure on 2415 film with an 8″, f4 Wright-Newtonian reflector.*