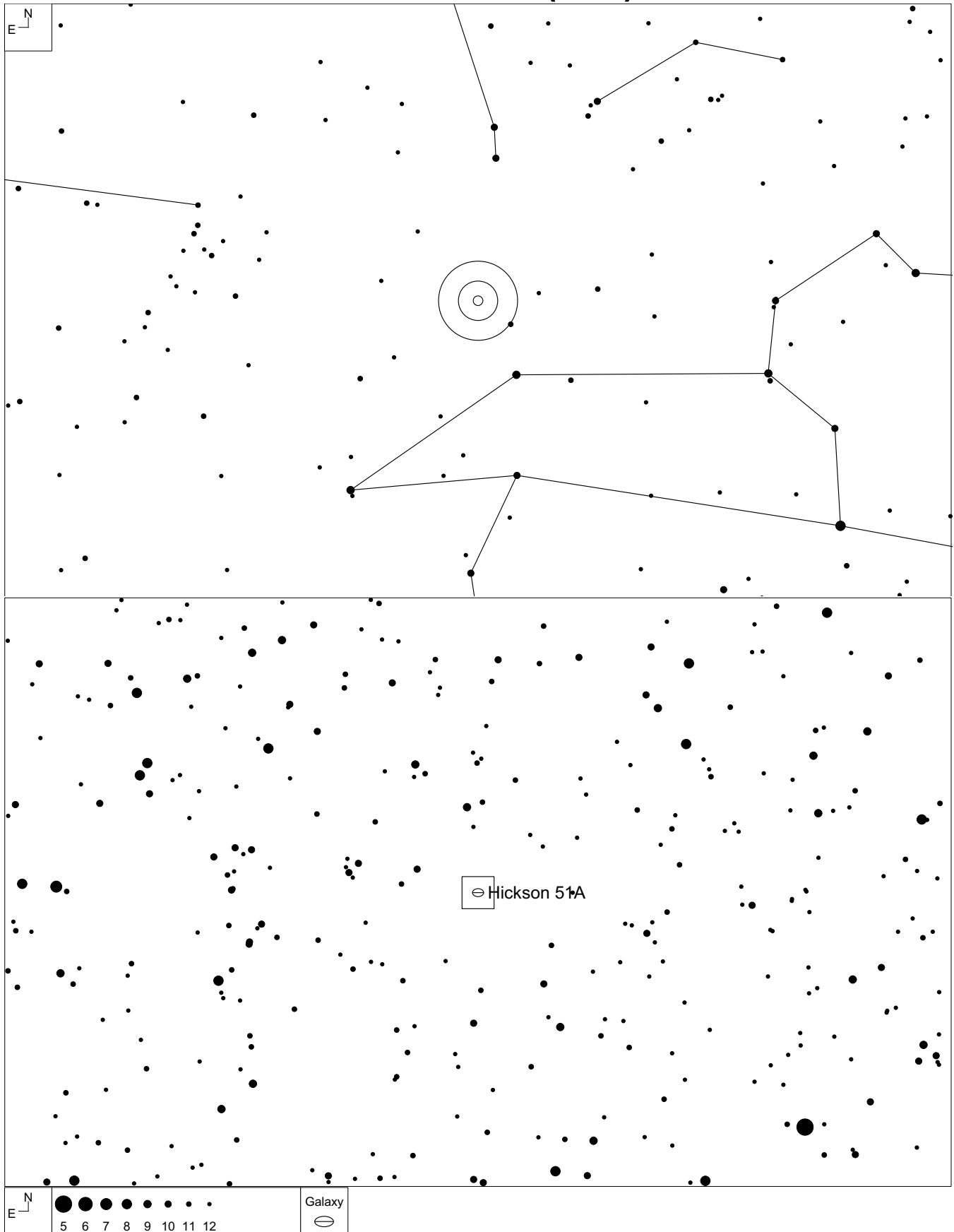


Hickson 51 (Leo)



22" f/4.0 @ 203, 377, 528 and 881x (NELM: 6.5, T: 7/10)

This interesting group of five bright and two very faint galaxies were picked up. The two faint galaxies are right next to NGC 3651, almost merged into the halo of the parent galaxy.

Component A (NGC 3651) was a very bright round patch at about 50" across. I needed 377x to resolve this and **Component F (PGC 34899)** which was an extremely small round patch, almost stellar and due south of NGC 3651 and barely resolved.

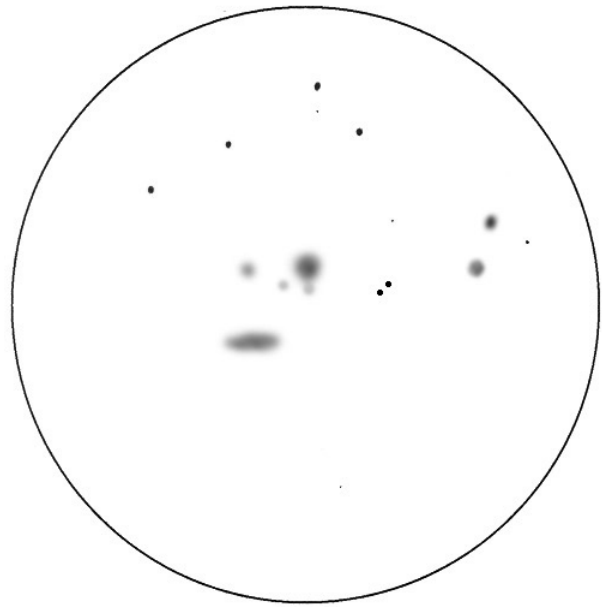
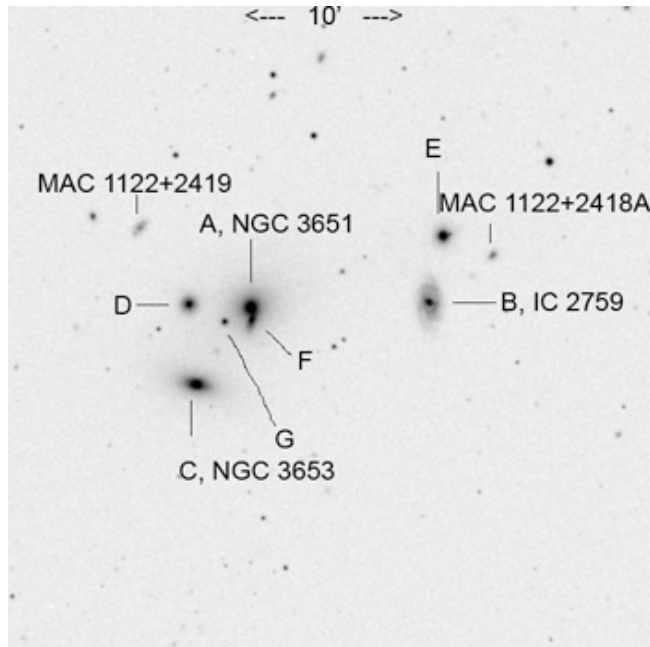
Component C (NGC 3653) was an elongated (3:1), very bright patch with PA of about 90°. It lies about 90" SE of NGC 3651. Estimated size is about 90" across the long side.

Component D (MCG+4-27-30) lies directly north of NGC 3653 at a distance of 60" and directly southeast of NGC 3651 by 80" forming an isosceles right triangle. It was a round patch with even surface brightness at about 20" across.

Component G (PGC 34901) is an extremely small round patch lying between PGC 34899 and MCG+4-27-30, just slightly south of the line and closer to PGC 34899. Size is 10" across.

Component B (IC 2759) was a round bright patch lying directly west of NGC 3651. The patch is 25" across. Lies 3' west of NGC 3651.

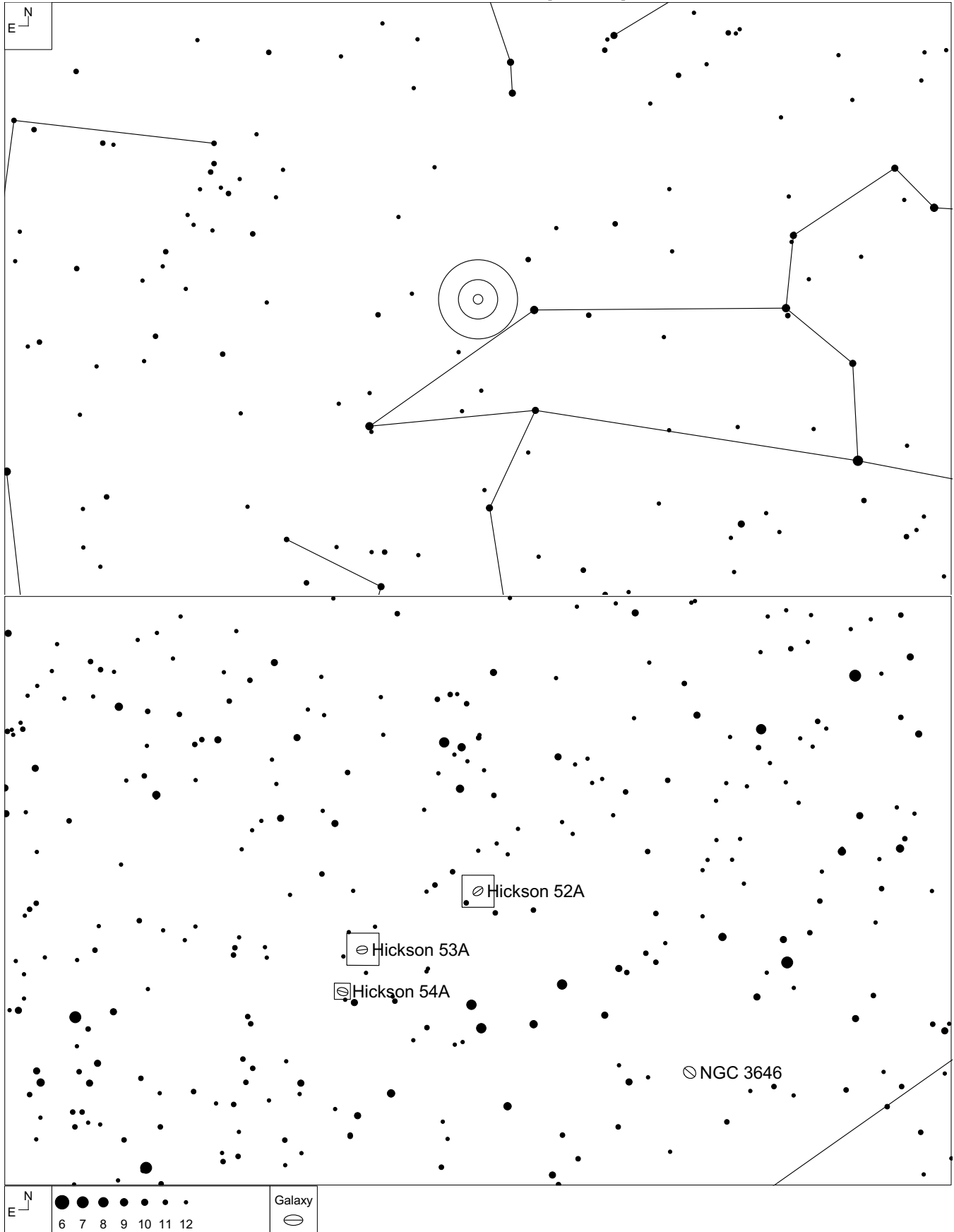
Component E (MCG +4-27-27) lies NNW of IC 2759 at a distance of about 60", and appears a bright round patch of about 20" across with much brighter center.



22" f/4.0 reflector @ 528x Field: 6.8'
NELM: 6.5 T: 7/10

ID	Other ID	Type	RA	Dec	Mag	Size	v (km/s)
51A	NGC 3651	E1	11 22 26.4	+24 17 56	14.2b	1.0 x 1.0'	7696
51B	IC 2759	SBbc	11 22 14.3	+24 18 00	15.6b	1.2 x 0.6'	8183
51C	NGC 3653	S0	11 22 30.1	+24 16 45	14.6b	1.6 x 0.6'	8902
51D	MCG +4-27-30	Sa	11 22 30.6	+24 17 59	15.7b	0.4 x 0.4'	7529
51E	MCG +4-27-27	E2	11 22 13.3	+24 19 01	15.1b	0.4'	7700
51F	PGC 34899	S0	11 22 26.0	+24 17 37	15.2b	0.5 x 0.2'	7532
51G	PGC 34901	cl	11 22 28.2	+24 17 34	16.2b	0.2 x 0.2'	-

Hickson 52 (Leo)



22" f/4.0 @ 203, 377, 528 and 881x (NELM: 6.5, T: 7/10)

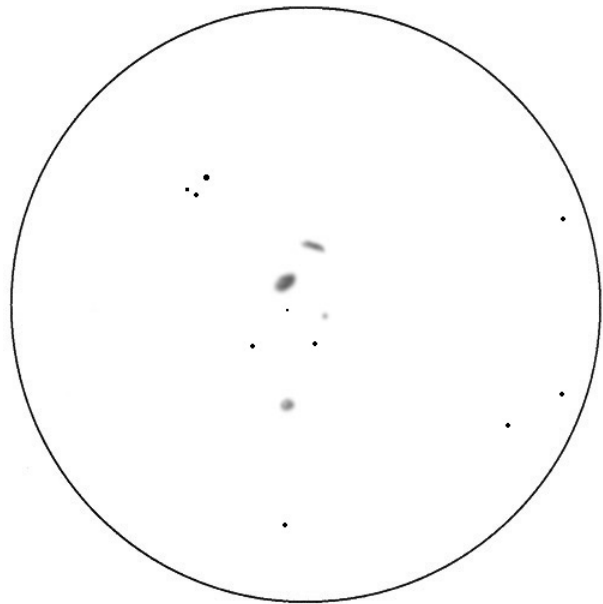
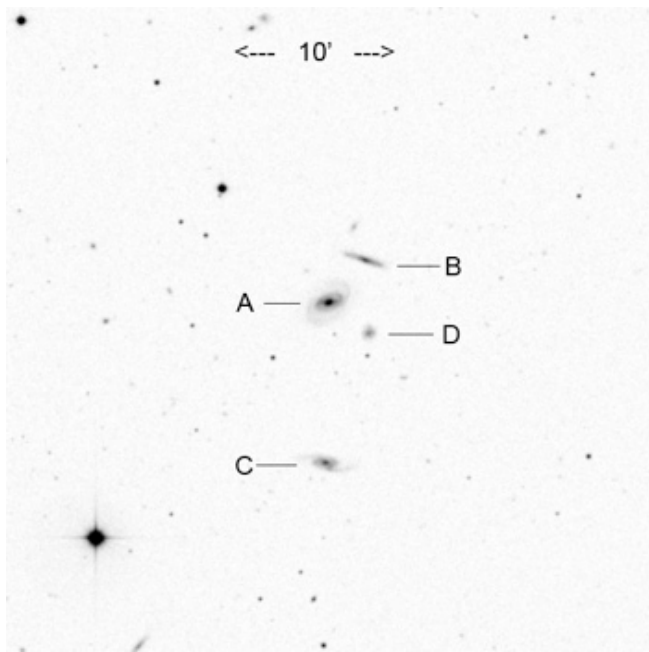
At 377x, I saw all four members in this challenging group with difficulty, arranged in a crooked north-south line.

Component A (PGC 35183) appeared as a slightly elongated (2:1) patch with a PA of 135° . It showed an even surface brightness with no nuclear condensation. Estimated size is about 30" long and 15" wide.

Component B (PGC 35179) – This member appeared as an even surface brightness thin spindle of 40" long. PA = 80° and less than 1' NW from PGC 35183.

Component C (PGC 35184) – This galaxy is a faint round 20" diameter disk with no condensation in the middle. It is situated 3' due south of PGC 35183.

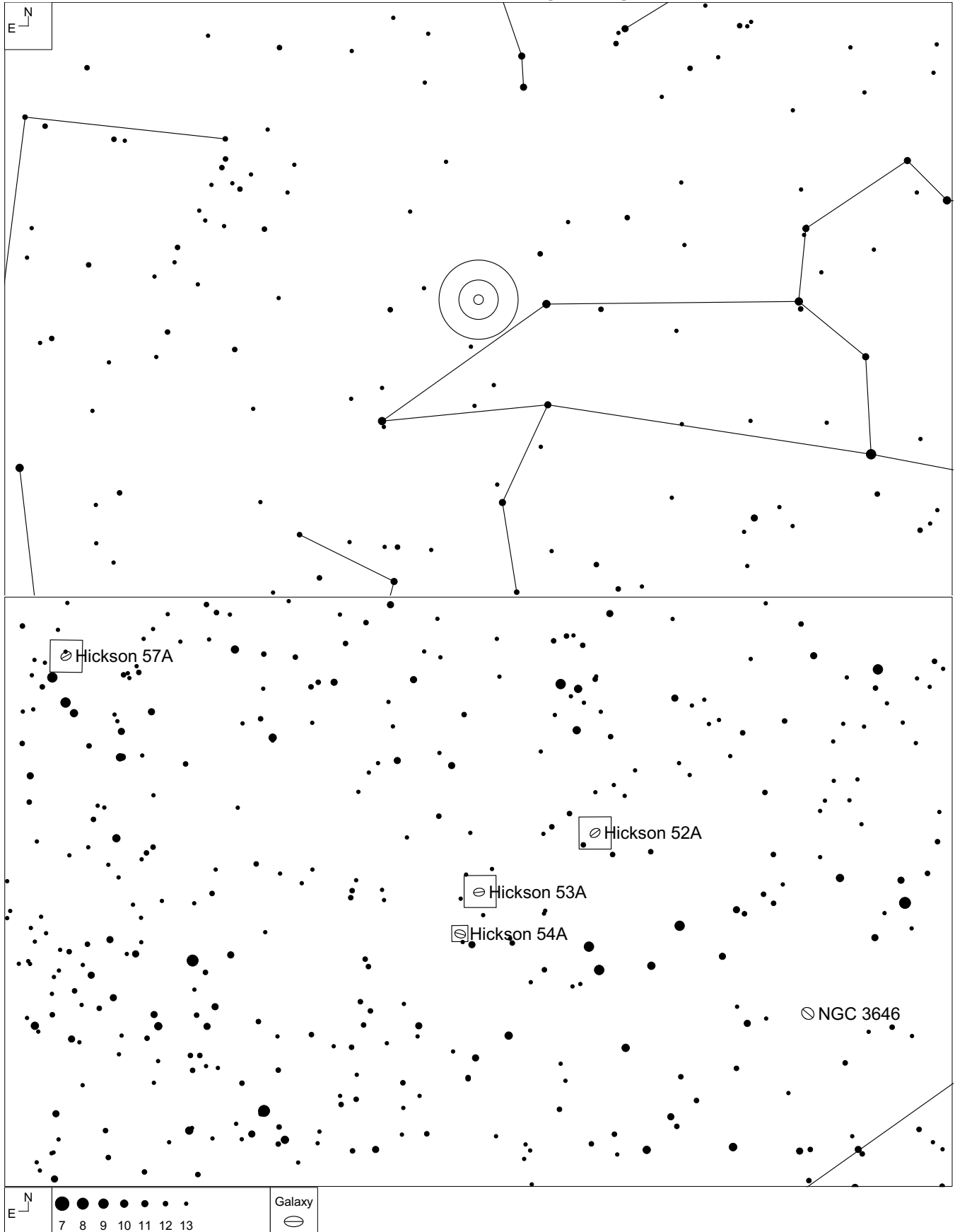
Component D (PGC 35178) – This component is an extremely faint, extremely small round patch less than 10" in diameter. It lies 1' southwest of PGC 35183.



22" f/4.0 reflector @ 377x Field: 10.3'
NELM: 6.5 T: 7/10

ID	Other ID	Type	RA	Dec	Mag	Size	v (km/s)
52A	PGC 35183	SBab	11 26 18.7	+21 05 46	15.4b	0.9 x 0.5'	12979
52B	PGC 35179	Sc	11 26 16.5	+21 06 24	16.4	0.9 x 0.1'	13040
52C	PGC 35184	Scd	11 26 19.2	+21 03 17	16.3	0.7 x 0.3'	12630
52D	PGC 35178	Sdm	11 26 16.3	+21 05 17	17.0	0.4 x 0.3'	6293

Hickson 53 (Leo)



22" f/4.0 @ 203, 377 and 528x (NELM: 6.5, T: 7/10)

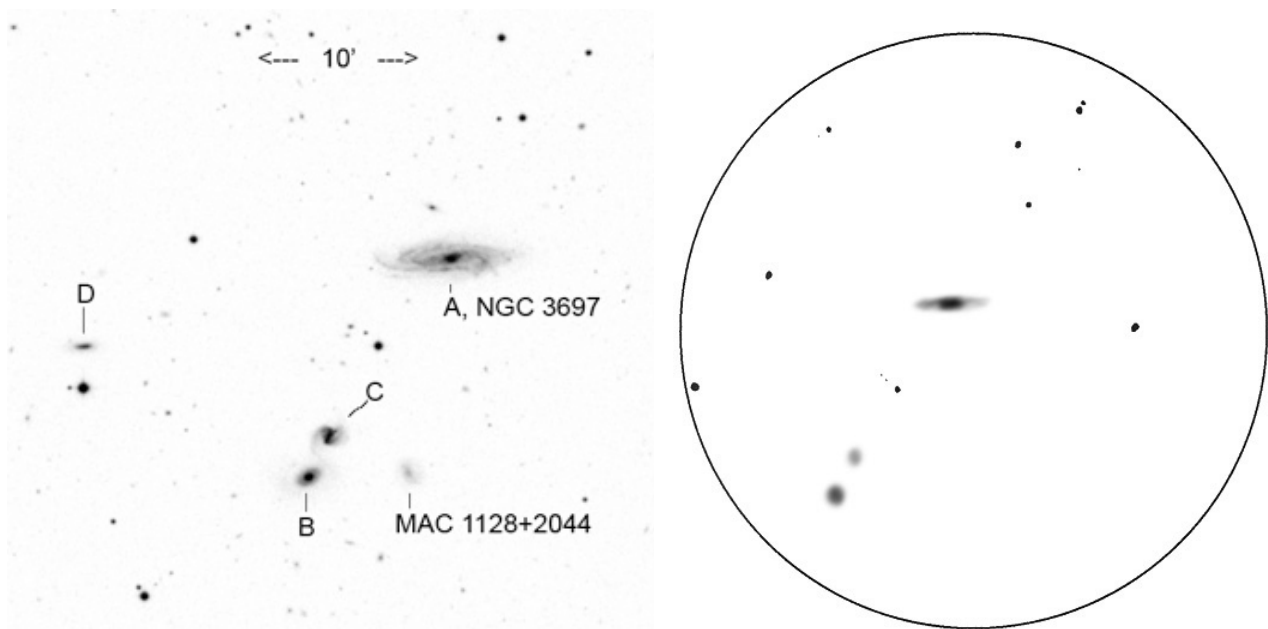
At 377 and 528x, I've seen only three of four galaxies in this quartet. The trio of galaxies seen is generally bright and easy aligned in a rough line with a 13.4 magnitude star in between. The position angle of the line is 145°.

Component A (NGC 3697) – This member is a bright very elongated oval (4:1) with a size of 150" by 40". It showed a significantly brighter nucleus of about 80" by 40". PA about 90°. This appears as a nearly edge-on spiral galaxy.

Component B (MCG+4-27-44) – It is a bright and round disk with a brighter center. The estimated size is 30" across. Forms a close pair with MCG+4-27-45 at about 50" apart. The orientation of the pair is about 160°, with MCG+4-27-44 being on the south end. This pair lies 4' SSE from NGC 3697.

Component C (MCG+4-27-45) – This galaxy shows a pretty bright, round disk of about 30" in diameter.

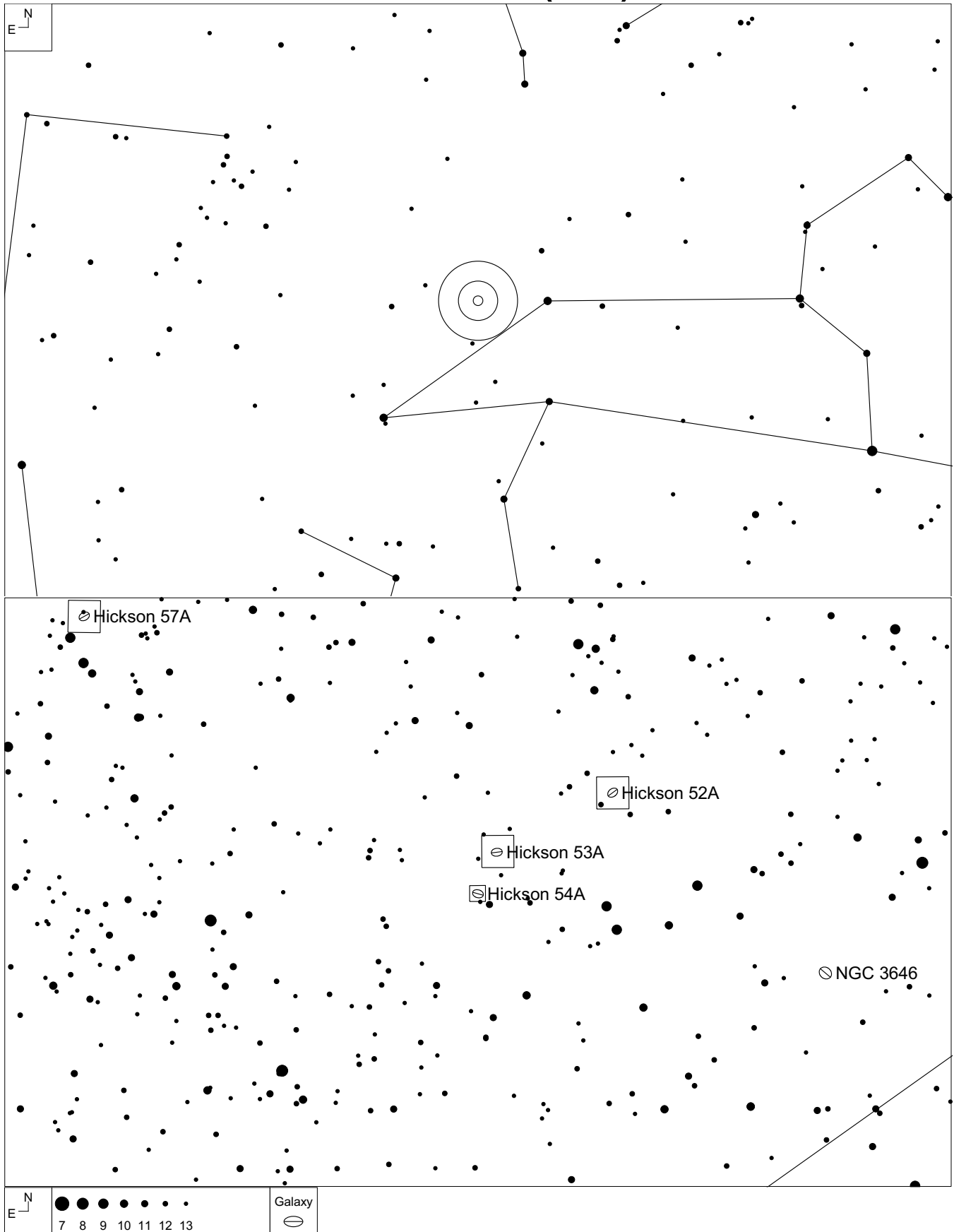
Did not see **Component D (PGC 35381)** as it is probably was very close to a magnitude 12 star, which is about 40" south.



**22" f/4.0 reflector @ 377x Field: 10.3'
NELM: 6.5 T: 7/10**

ID	Other ID	Type	RA	Dec	Mag	Size	v (km/s)
53A	NGC 3697	SBbc	11 28 50.3	+20 47 43	13.8b	2.6 x 0.7'	6261
53B	MCG +4-27-44	S0	11 28 59.9	+20 44 21	14.9b	0.7 x 0.5'	6166
53C	MCG +4-27-45	SBs	11 28 58.5	+20 44 49	15.1b	0.9 x 0.6'	6060
53D	PGC 35381	Sc	11 29 14.7	+20 46 25	16.7	0.6 x 0.3'	9070

Hickson 54 (Leo)



22" f/4.0 @ 203, 377, 528 and 881x (NELM: 6.5, T: 7/10)

This is a very tough group in terms of resolving the individual members from one smear. There are actually four galaxies in that little linear smudge as shown in the DSS photo! I saw only one of them or maybe I saw more than one that appeared as one through the 22-inch telescope. This is a must try again with a 30-inch or larger scope. I reobserved this object with my friend's 48".

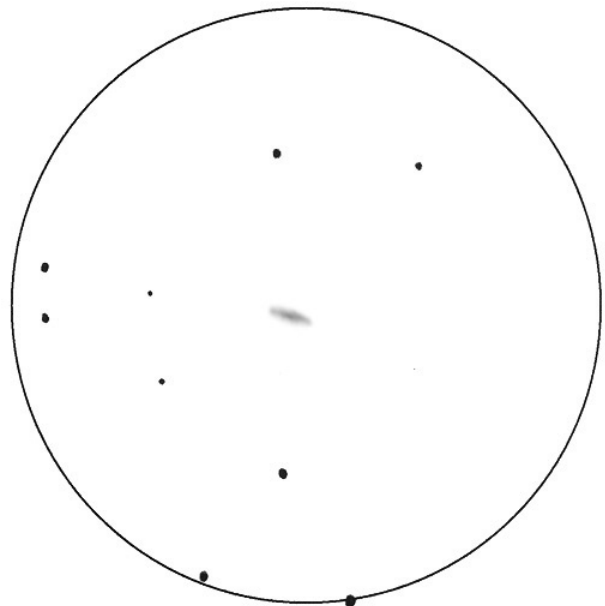
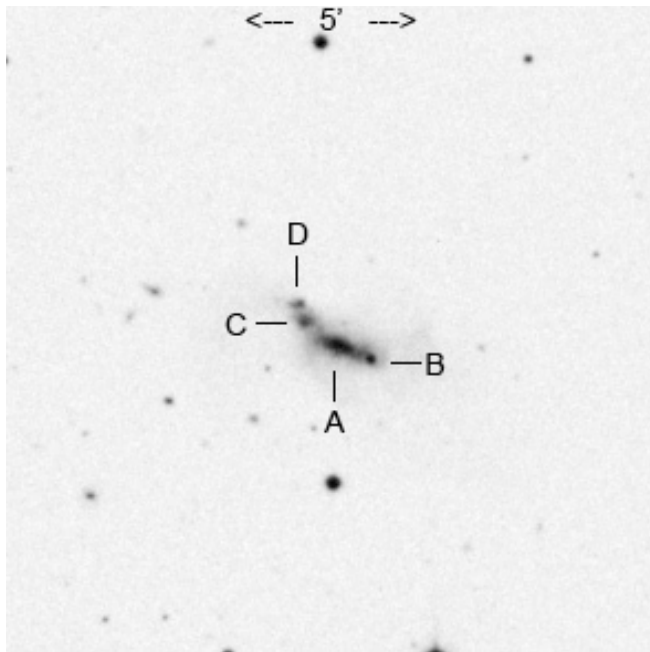
Component A (IC 700) is an elongated patch with an aspect ratio of 3:1. PA is about 80°. Could not see or resolve the other three components from this one. The estimated size of the visible part is about 40" long. The major axis dimension given is 0.4' = 24" and I saw more than that, so maybe I saw two or three unresolved galaxies.

Component B (PGC 35380) – Not seen, maybe?

Component C (PGC 35384) – Not seen, maybe?

Component D (PGC 35385) – Not seen, maybe?

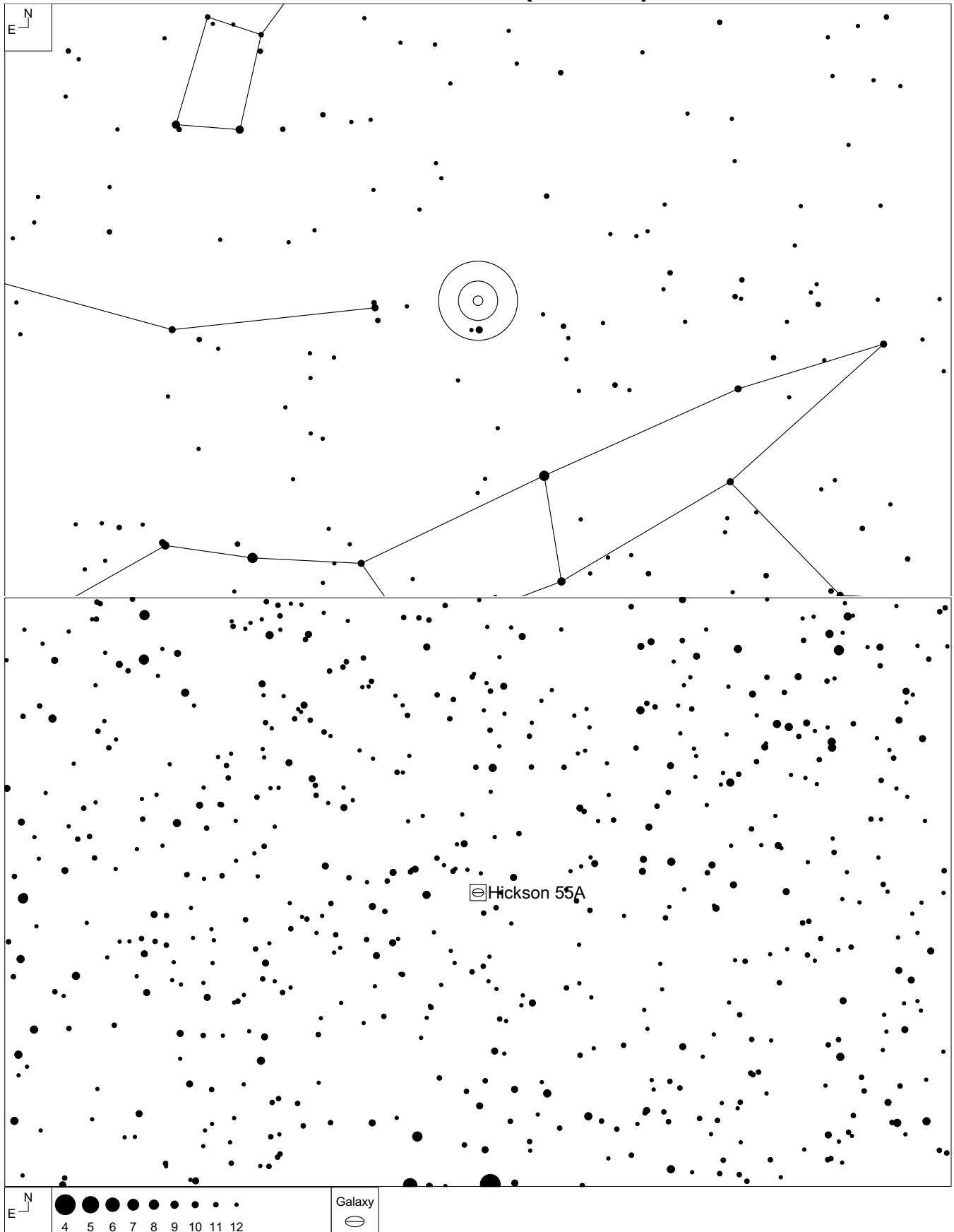
48" (488, 610 and 813x) – Unresolved glow with resolved individual roughly equally spaced cores in a slightly bent string of 0.8' long and aligned SW to NE. The NE end is slightly bent northwards. The core of component A is slightly elongated of about 0.2' across. The other three cores are nearly stellar to stellar. A bright mag 9.6 star lies 4.8' SW.



**22" f/4.0 reflector @ 881x Field: 4.1'
NELM: 6.5 T: 7/10**

ID	Other ID	Type	RA	Dec	Mag	Size	v (km/s)
54A	IC 700	Sdm	11 29 15.3	+20 34 59	14.0b	0.4 x 0.3'	1397
54B	PGC 35380	Im	11 29 14.2	+20 34 50	16.2b	0.3 x 0.2'	1412
54C	PGC 35384	Im	11 29 16.3	+20 35 11	17.0	0.2'	1420
54D	PGC 35385	Im	11 29 16.5	+20 35 19	18.5	0.3 x 0.2'	1670

Hickson 55 (Draco)



22" f/4.0 @ 203, 377, 528 and 881x (NELM: 6.5, T: 7/10)

At 528 and 881x, this very challenging group is a string of five galaxies in a string of only 90" long. The string lies in an N-S line.

At 881x, I saw three very faint distinct nucleuses about 20" apart from each other. They are most likely Components A, B and C, with the middle slightly fainter than the other two. All are less than 10" in diameter.

This is a must try again with the 30". Well, I didn't use the 30" but my friend's 48". My observation as below.

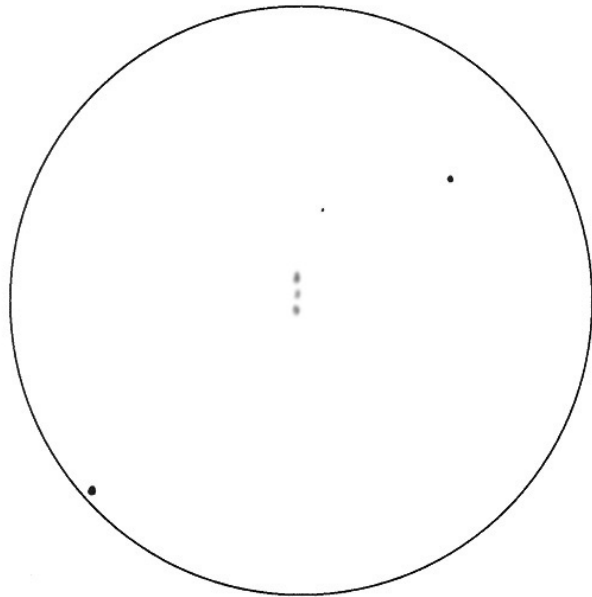
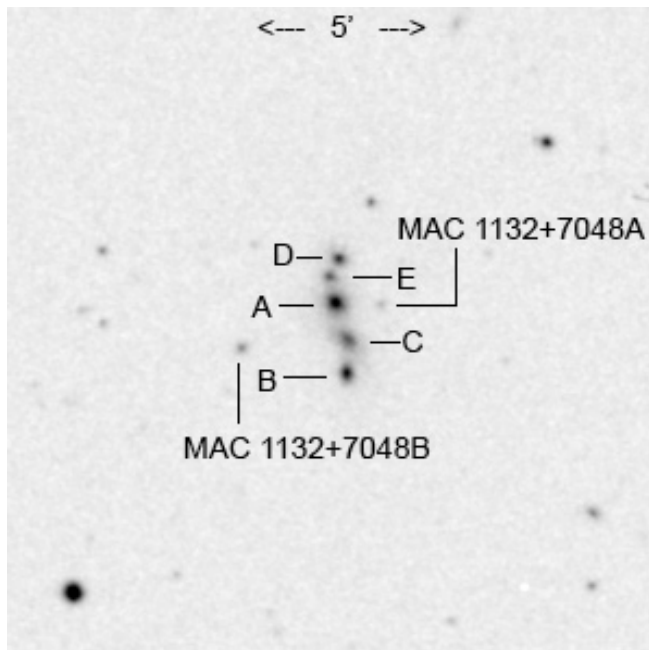
48" @ 488x – All five galaxies were well resolved in a curvy line aligned N-S.

The middle galaxy, **component A**, is the brightest of the bunch. It is the largest of the bunch and bright with a brighter core.

The southernmost galaxy, **component B**, is the second brightest, appears as a small bright glow with a much brighter core.

The northern most member, **component D**, is third brightest and is a bit more compact than the two brighter ones. Much brighter center.

The second one down from the north, **component E**, end is fairly faint with a brighter core. It is also the smallest of the bunch. The last one, **component C**, 2nd from the south, is pretty faint glow with a slightly brighter core.



22" f/4.0 reflector @ 881x Field: 4.1'
NELM: 6.5 T: 7/10

ID	Other ID	Type	RA	Dec	Mag	Size	v (km/s)
55A	MCG +12-11-28A	E0	11 32 07.0	+70 48 56	15.9b	0.2'	15820
55B	MCG +12-11-28B	S0	11 32 05.9	+70 48 29	16.4	0.2 x 0.1'	15480
55C	MCG +12-11-28C	E3	11 32 06.1	+70 48 41	16.9	0.2 x 0.1'	15690
55D	MCG +12-11-28D	E2	11 32 06.9	+70 49 13	17.1	0.1'	16070
55E	MCG +12-11-28E	Sc	11 32 07.5	+70 49 06	17.4	0.1'	36880