Details for the 2017 Observer's Challenge

January: NGC 1545 - Open Cluster; Perseus; Mag. 6.2; Size 12'
"Near the center of this cluster 6 cm shows a pretty 2'.5 triangle pointing SW, formed by blue, orange, and yellow stars (moving clockwise from the SW apex). In 30 cm about 35 stars are visible in an 18' area." Skiff & Luginbuhl *Observing Handbook and Catalog of Deep-Sky Objects*

RA: 04h 20.9m Dec. +50° 15'

February: Winter Albireo - Double Star - Canis Major; 5.0/5.8; Sep. 27"
Identification is h 3945 from the John Herschel catalog. The lower case h represents John, and capital H is for William Herschel. Orange and Blue -"Largely unknown and unobserved....a pity" James Mullany and Will Tirion - *The Cambridge Double Star Atlas.*

RA: 07h 17m Dec. -23° 19'

March: M67 - NGC 2682 - Open Cluster - Cancer - Mag. 7.0; Size 30'
"An easy cluster to resolve. In the 4-inch, the star hues of M67 are predominantly rust, orange, gold and yellow." John Mallas with Evered Kreimer: *The Messier Album*

RA: 08h 50.4m Dec: +11° 49'

April: NGC 3245 - Galaxy - Leo Minor; Mag. 11.8; Size 2' x 1'
"Bright oblong with much brighter center and stellar core: 1° to NNE is galaxy NGC 3254..." Tom Lorenzin *1000+ The Amateur Astronomer's Field Guide to Deep-Sky Observing*

RA: 10h 27.3 Dec. +28° 30'

May: M98 - NGC 4192 - Galaxy - Coma Berenices - Mag. 10.0; Size 7' x 5'
"In the 4-inch refractor, M98 is grainy and mottled like a globular cluster, but with some bright knots superimposed." John Mallas with Evered Kreimer: *The Messier Album*

RA: 12h 13.8m Dec. +14° 54'

June: NGC 6015 - Galaxy - Draco - Mag. 11.1; Size 5.4' x 2.3'
"This galaxy is faintly visible to 15 cm about 2'.5 E of a mag. 11 star. In 25 cm it is 3' x 1'.25 in pa 30°, a fat oval broadly brighter to the center with a narrow central bar occasionally visible. It grows to 5'.5 x 1'.8 with 30 cm, with weak concentration to a broad core. A mag. 13.5 star is visible within the halo 2' S." Skiff & Luginbuhl; *Observing Handbook and Catalog of Deep-Sky Objects*

RA: 15h 51.4m Dec. +62° 19'

July: M14 - NGC 6402 - Globular Cluster - Ophiuchus - Mag. 7.6; Size 12'
"M14 has a nearly circular form in the 4-inch. The central two-thirds of the visual image is bright, but toward the outer edges the light fades rapidly. Some graininess was noticed at moments of steady seeing, giving the impression that a little more optical power would show some stars." John Mallas with Evered Kreimer: *The Messier Album*

RA: 17h 44.9m Dec. -03° 15'

August: M24 - Starcloud - Sagittarius - Size 1º x 2º
"In the 4-inch, is a compact glow, containing stars forming a "V." There are beautiful star fields in this area." John Mallas with Evered Kreimer: *The Messier Album*

"M24, the Small Sagittarius Starcloud, is visible to the unaided eye as a large, bright patch in the Milky Way just north of Mu Sagittarii. Northeast of M24's center, the little open cluster NGC 6603 is a small, misty patch when seen through a small telescope. A 10-inch reveals a rich gathering of faint stars." Sue French *Deep-Sky Wonders*
"A faint but very rich rich group...but not easy to detect in any aperture smaller than 8-inches. Suspended in front of M24 is B92, one of the most prominent dark nebula in the sky." James Mullaney *Celestial Harvest*

September: NGC 6905 - Planetary Nebula - "Blue Flash Nebula" - Delphinus - Mag. 12; Size 42" x 35" with mag. 14.2 central star.
"An unusual and overlooked planetary nebula, visible in a 5-inch and a fascinating sight in a 10-inch or larger scopes. Lies near the Delphinus-Sagittarius border in a rich Milky Way field." James Mullaney *Celestial Harvest*

RA: 18h 17m Dec. -18º 36'

October: M15 - NGC 7078 - Globular Cluster - Pegasus - Mag. 6.0; Size 10'
"The slightest optical aid reveals this grand globular. In the 4-inch, M15 appears circular, nestled in a fine star field. The center of the cluster is very intense, with quick fading toward the edges, but M15 is not resolved by this aperture. John Mallas with Evered Kreimer: *The Messier Album*

"Beautiful sight in a 6-inch at 90x, but it's not completely resolved even in a 13-inch at 190x on most nights." James Mullaney *Celestial Harvest*

"Through my 105mm refractor at 47x, the halo of the cluster looks mottled. At around 200x, the cluster appears slightly oval and some of the outer stars pop into views, but the center remains unresolved." *Sue French Deep-Sky Wonders"*

RA: 21h 30m Dec. +12º 10'

November: NGC 772 - Galaxy - Aries - Mag. 12; Size 7.1' x 4.5'
"This galaxy is visible in 15 cm; it has a small intense core and a stellar nucleus." Skiff & Luginbuhl *Observing Handbook and Catalogue of Deep-Sky Objects.*

RA: 01h 59m Dec. +19º 00'

December: NGC 925 - Galaxy - Triangulum - (Mag. V 10.0 - sfc. br. 13.0) Size 9'8 x 6'.0'
"This galaxy is faintly visible in 6 cm, which shows a small, round core and a halo seemingly elongated N-S, though larger apertures show that this impression is caused by some faint associated stars." Skiff & Luginbuhl *Observing Handbook and Catalog of Deep-Sky Objects"*

RA: 02h 27m Dec. +33º 34'