

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Anonymous	The Romance of the Calendar	2	1937	calendar, Julian, Gregorian
Anonymous	Other Worlds than Ours	3	1937	Planets, Solar System
Anonymous	The Solar Family	3	1937	Planets, Solar System
Royal Elliott	Behind the Sciences	3	1937	GO, planetarium, exhibits, Geological Clock
Anonymous	The Stars of Spring	4	1937	Constellations, Stars,
Anonymous	Pronunciation of Star and Constellation Names	4	1937	Constellations, Stars
Anonymous	The Cycle of the Seasons	5	1937	Seasons, climate
Anonymous	The Ice Ages	5	1937	United States, Climate, Greenhouse Gases, Volcano, Ice Age
	New Meteorites at the Griffith Observatory	5	1937	Meteorites
Anonymous	Conditions of Eclipse	5	1937	Solar eclipse, June 8, 1937, Umbra, Sun, Moon
Anonymous	Occurrences	6	1937	Ancient and Modern Eclipse
Anonymous	Observations	6	1937	Chinese, Observation, Eclipse, Relativity
	The Sky as Seen from Different Latitudes	6	1937	Stars, Celestial Sphere, Equator, Pole, Latitude
Anonymous	Laws of Polar Motion	6	1937	Pole, Equator, Latitude
Anonymous	The Polar Aurora	7	1937	Northern lights, Aurora
Anonymous	The Astrorama	7	1937	Star map, Planisphere, Astrorama
Anonymous	The Life Story of the Moon	8	1937	Moon, Earth's rotation, Darwin
Anonymous	Conditions on the Moon	8	1937	Moon, Temperature,
Anonymous	The New Comet	8	1937	Comet Finsler
Anonymous	Comets	9	1937	Halley's Comet, Meteor
Anonymous	Meteors	9	1937	Meteor Crater, Shower, Leonids
Anonymous	Comet Orbits	9	1937	Comets, Encke
	The Circular Zodiac of Denderah	10	1937	Zodiac, Constellation
Anonymous	Constellation Myths as Human History	10	1937	Constellation, Lore, Myth
				Constellation, Andromeda, Perseus, Pegasus, Cetus
Anonymous	The October Demonstration	10	1937	Cassiopeia, Perseus,
Anonymous	Two Recent Supernovae	10	1937	Supernova, Tycho Brahe, Mira,
	An Interesting Old Marine Telescope	10	1937	Telescope, Miller, Bradbrook, Napoleon Galaxy, Magellanic Clouds, William Herschel, Milky Way, Nebula
Anonymous	Our Galaxy and Beyond	11	1937	Cluster, Pleiades, Hyades
Anonymous	Star Clusters	11	1937	Polaris, Precession
Anonymous	The Wandering of the Pole	12	1937	Physics, Flatland, Hall of Science
Anonymous	The Fourth Dimension	12	1937	Planets, Constellations, Eclipses
Anonymous	A Preview of the 1938 Sky	1	1938	The History of the Telescope.
Anonymous	Part 1 of 3	1	1938	Galileo, Herschel, Telescope
Anonymous	The Temperature of Stars	2	1938	Thermocouple, Black Body, Spectra, Thermopile
	The History of the Telescope			Herschel, Mount Wilson,
Anonymous	Part 2 of 3	2	1938	Telescope, Yerkes, Refractor, Reflector
Anonymous	The Solar Spectrum	2	1938	Sun, Spectra, Fraunhofer, Kirchhoff, Wollaston
Anonymous	The Sun as a Star	3	1938	Sun, Star

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Anonymous	The Earth and The Sun	3	1938	Earth, sun, Sunspots, Solar Telescope, Radio, Mount Wilson
Anonymous	The History of the Telescope	3	1938	Telescopes
Dr. Walter S. Adams	George E. Hale	4	1938	George Hale, Mount Wilson, Palomar Telescope, Construction
Anonymous	The 200-Inch Telescope	4	1938	Yerbanis, Eclipse, Telescope
Anonymous	An Eclipse Expedition	5	1938	Vulcan, Planet
Anonymous	The Mythical Planet, Vulcan	5	1938	GO, Zeiss, planetarium, show
Anonymous	The Zeiss Optical Planetarium	1	1939	Bessel, star, near, Cygni, parallax, Wolf 359, Doradus, dwarf
Anonymous	The Stars of Our Neighborhood	2	1939	star, magnitude, constellation, observe, sky, telescope
Anonymous	The Stars of Winter	2	1939	Arcturus, star, light, year, position, sky, observe, disappear, Schlesinger
Anonymous	The Visit of Arcturus to the Sun	3	1939	Meteorite, siderolite, asteroid, iron, atmosphere, retrieval
Anonymous	Meteorites	3	1939	Lick, observatory, refracting, telescope, construction, Holden, Crossley, discoveries
Aitken, Robert	The Story of Lick Observatory Foretelling Eclipses by Simple Methods: The Amateur May Predict By Using only Addition and Subtraction	4	1939	predict, eclipse, equation, solve, year, saros, perigee, apogee, synodic atmosphere, climate, earth, particle, sun, temperature, black body, variation
Anonymous	Factors Which Produce our Climate	4	1939	meteor, sky, observe, report, fireball, search
Anonymous	The Desert Meteor of November 16, 1938	5	1939	Halley, comet, return, Newton, Tycho, Clairaut
Pruett, Hugh J.	The Story of Halley's Comet	6	1939	Herschel, sketch, Mars, cloud, life, land, sea, irrigation, intelligence
Anonymous	The Martian Dream	7	1939	Swift, Gulliver, Hall, Mars, Deimos, Phobos GO, planetarium, show
Anonymous	Gulliver's Astronomers	7	1939	star, observe, sky,
Anonymous	Mars Comes Near Us	7	1939	telescope, Lyra, Cygnus, Aquila, Sagitta, Capricornus, Sagittarius, Scorpius, Hercules, Jupiter, Saturn, meteor globular cluster, Hercules, dust, spectra, luminosity, distance, sky, observe
Anonymous	The Stars of Summer	8	1939	Sun, refrigerator, compare, temperature, photosphere, spot, magnetic
Anonymous	A World of the Hercules Cluster	8	1939	Earth, atmosphere, Everest, explore, stratosphere, rocket, sound
Anonymous	Refrigerators Of The Sun Exploring the Earth's Atmosphere	9	1939	cosmic, ray, x-ray, radioactivity, electroscope, discovery, World War I
Anonymous	Cosmic Rays	9	1939	Moon, tide, high, low
Anderson, Carl David	Tides and the Moon	10	1939	Antarctic, expedition, Byrd, meteor, observatory, aurora
Anonymous	Meteor Observations in the Antarctic	10	1939	The Solar Telescopes of the Griffith Observatory
Poulter, Thos C.	The Solar Telescopes of the Griffith Observatory	11	1939	GO, solar, telescope

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Anonymous	The Galaxies of Space The Lunar Eclipse of October 27, 1939	12	1939	star, nearest, light year, Magellanic Cloud, Andromeda, nebula, galaxy, Cepheid Moon, Sun, eclipse, observe, sky, telescope, partial GO, index
-	Index to Volume III, 1939	12	1939	
Leonard, Frederick C.	The Goose Lake Siderite: The Largest Known Meteorite of California	1	1940	meteor, California, Goose, Lake, siderite, Schmidt, investigation, Muroc, aerolite
Anonymous	The Sky of 1940	1	1940	Sky, telescope, observe, planet, star
Anonymous	Where will Saturn Be on January 1, 2440?	2	1940	Saturn, position, future, calculation, equation
Anonymous	How to find the Position of the Sun Among the Stars for Any day of the Year	2	1940	sky, position, Sun, solstice, summer, winter, ecliptic
Baumgardt, Mars F.	Amateurs and Telescopes of Early Southern California	3	1940	gold rush, railroad, Bliss, amateur, telescope, Baumgardt, Lowe, Swift, discovery, Griffith, Spalding, Hooker
-	Planetary Photographs from the Griffith Observatory	3	1940	GO, photo, planet
Anonymous	Causes of Eclipses	3	1940	eclipse, annular, moon, partial, phase, sun
Anonymous	Eight Thousand Eclipses of the Sun	3	1940	Sun, eclipse, history
Anonymous	The Variety of Stars	4	1940	Sirius, extreme, luminosity, temperature, weight, dwarf
Van Osdel, Edgar B.	The Spectroheliograph	4	1940	spectroheliograph, camera, sun, photo
	The Griffith-Brackett Observatories Eclipse			
Anonymous	Expedition (The General Story)	5	1940	GO, Brackett, Mexico, Elliot, Navy, expedition, eclipse, Witney, Alter
	The Program Equipment, and Personnel of the Eclipse			
	Expedition from the Frank P. Whitney, Walter T.			equipment, expedition, eclipse, Mexico, Brackett, GO, telescope, camera, personnel
Anonymous	Brackett of Pomona College	5	1940	
	Record of the Eclipse	5	1940	Eclipse, record, photograph, Zeiss, Antarctic, continent, Amundsen, size, climate, geography
Bissell, Malcolm H.	"Down Under" - The Antarctic Continent	6	1940	air, atmosphere, gas, particles, Kaplan nebula, atmosphere, earth, element, excite, light, spectrum
Anonymous	Our Air and Other Gases	6	1940	Herschel, life, telescope, Jupiter, Saturn, distance, star, Caroline meteor, asteroid, siderite, aerolite, iron, discovery, retrieval
Kaplan, Joseph	A Laboratory Nebula	6	1940	GO, planetarium, show
Anonymous	William Herschel	7	1940	Moon, observatory, telescope, atmosphere, dark, sky, size
Leonard, Frederick C.	Meteorites or Immigrants from Space	8	1940	binary, star, Herschel, Sirius, companion, visual, double, spectroscopic, eclipse, Algol
Anonymous	Comets and Meteors	8	1940	GO, Monument
Anonymous	Observatories on the Moon?	9	1940	
Anonymous	Double Stars	10	1940	
Anonymous	Astronomers Monument	10	1940	

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Anonymous	Sunburned Mercury	11	1940	Mercury, surface, temperature, path, phase, observe, sky, telescope, transit
Anonymous	An Interesting New Comet	11	1940	Comet, Cunningham, observe, sky, telescope
Anonymous	Equatorial Venezuela	11	1940	Venezuela, equator, expedition
Anonymous	The Christmas Star	12	1940	star, Christmas, Bible, Jesus, comet, Halley, nova
Anonymous	Our Calendar from Year to Year	12	1940	Julian, calendar, Gregorian, month, year, week, equation
Anonymous	Clock Of The Ages	12	1940	GO, clock, Cosmochron
-	Index to Volume IV, 1940	12	1940	GO, index
Anonymous	A Preview of the 1941 Sky	1	1941	sky, observe, telescope, planet, eclipse
Anonymous	Great Comets of the Past	1	1941	comet, Halley, Delavan, Tycho Brahe, 1811, 1843, Donati, 1861, 1882
Anderson, J. A.; Porter, Russell W.	The Observatory on Palomar Mountain	2	1941	telescope, Palomar, reflector, design, mounting
Anonymous	The Triple Conjunction of Jupiter and Saturn	2	1941	Jupiter, Saturn, conjunction, sky, observe
Anonymous	Giant Worlds of the Solar System	2	1941	Jupiter, Saturn, size, diameter, Cassini, ring, satellite
Anonymous	The Stars of our Sky	3	1941	binary, cluster, Perseus, nebula, sky, observe
Anonymous	Springtime through the Ages	3	1941	precession, conical, movement, earth, rotation, Pole Star, Orion, sky, observe
Merrill, Paul W.	Stars in Action Long and Short Nights (Planetarium Demonstration for April)	4	1941	variable, Lyrae, Cepheid, nova, supernova, Tycho
Nicholson, Seth B.	The Satellites of Jupiter	5	1941	GO, planetarium
Anonymous	The Rotation of Our Galaxy	5	1941	Jupiter, satellite, Galileo, Barnard, Io, Ganymede
Bissell, Malcolm H.	The Next Two Billion Years: The Past as a Preface (Part 1 of 2)	6	1941	GO, exhibit, rotation, galaxy
Anonymous	Ancient Measures of the Distance to the Moon	6	1941	history, earth, geology, ice age, climate, coral, fossil
Bower, E. C.	Telling Time from the Stars	6	1941	Moon, Aristarchus, Greece, eclipse, distance
Bissell, Malcolm H.	The Next Two Billion Years (Part 2 of 2)	7	1941	Dipper, time, observation, sky, Polaris, equation
Anonymous	Queen of the Evening Sky	7	1941	glacial, period, climate, man, Tertiary, cycle, geologic, deforestation, civilization, destruction
Anonymous	Finding Distances of Stars	8	1941	Venus, sky, observe, telescope
Anonymous	The Planetaria In The United States	8	1941	parallax, distance, Alpha Centauri, Cepheid, measure
Anonymous	Life in the Universe	9	1941	GO, planetarium, United States, Buhl, Hayden, Fels, Adler
Anonymous	Lowell's Maps of Mars	9	1941	Mars, Earth, life, animal, plant, telescope, extra solar, planet, chemistry, idealism
Olivier, Charles P.	Long Enduring Meteor Trains	10	1941	Mars, Lowell, Canal, photograph
				meteor, light, streak, trail, observe, sky, Leonids, Perseid

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Slipher, E. C.	Mars	10	1941	Mars, opposition, sky, observe, season, telescope, hemisphere
Anonymous	Additional Off Year Sunspots	11	1941	sunspot, photograph
Anonymous	A Trick With the Moon	11	1941	Moon, age, equation, calculation
Anonymous	A Map of the Heavens	11	1941	star map, sphere, declination, celestial, pole, Polaris, ascension, constellation, zenith
Seares, Frederick H.	Absorption by the Dust of Space	12	1941	light, absorption, dust, interstellar, Kapteyn, Barnard, Russell, gas, Hubble, Milky Way
Dinsmore, Alter -	Our Galaxy and Beyond	12	1941	GO, planetarium, galaxy
	Index to Volume V, 1941	12	1941	GO, index
Cleminshaw, C. H.	Galileo	1	1942	Galileo, death, pendulum, telescope, moon, Jupiter, satellite, Saturn, Venus, Sun, spot, Church
Alter, Dinsmore	Seeing 1942 in the Sky	1	1942	sky, observe, eclipse, telescope, planet clock, time, Sun, Regulus, solar, day, sidereal, daylight savings
Cleminshaw, C. H.	The Time of Day	2	1942	
Cleminshaw, C. H.	The 200-Inch Telescope	2	1942	Palomar, telescope, build, photo
Alter, Dinsmore	Helping the Astronomy Student (Part 1 of 2)	2	1942	teach, student, well, improve, class near, star, Wolf 359, Canopus, Vega, parsec, sampling, parallax, mainsequence, Hertzsprung- Russell
Kuiper, Gerald P.	The Nearest Stars	3	1942	definition, light year, parsec, parallax, proper motion, blink survey, magnitude, spectral type
Alter, Dinsmore	Some Common Astronomical Terms	3	1942	teacher, model, coordinate, altazimuth, build, aberration, light
Alter, Dinsmore	Helping the Astronomy Student (Part 2 of 2)	3	1942	Siberian, meteorite, investigation, Kulik, "explosion, impact, expedition, witness"
Christie, William H.	The Great Siberian Meteorite of 1908	4	1942	Stamp, Mexico, first, Observatory, National, commemorate
Alter, Dinsmore	Stamps Commemorate Observatory Dedication	5	1942	Uranus, Neptune, Herschel, Newton, Adams, discovery, Leverrier, Galle
Cleminshaw, C. H.	The Discoveries of Uranus and Neptune	5	1942	GO, war, schedule
-	Revised Wartime Schedule of the Griffith Observatory	5	1942	Russia, Tamerlane, palace, discovery, Almagest, Ptolemy, Al Mamun, Albategnius, Persia, Baghdad, Arabic, almanac, zenith
Alter, Dinsmore	The Mohammedan Era in Astronomy	6	1942	The Mohammedan Era in Astronomy
Cleminshaw, C. H.	The Polar Sky	6	1942	GO, Planetarium, show
Cleminshaw, C. H.	The Galaxies of Space	7	1942	GO, Planetarium, show
Cleminshaw, C. H.	The North Star and The Big Dipper	7	1942	sky, observe, telescope, North Star, Polaris, Dipper, locate
Cleminshaw, C. H.	Eclipses of the Sun and Moon	8	1942	GO, Planetarium, show

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Cleminshaw, C. H.	Some Interesting Telescopic Objects	8	1942	telescope, observe, sky, interesting, Jupiter, Saturn, Polaris, Cygnus, Lyra
Cleminshaw, C. H.	The Sky from Pole to Pole	9	1942	Sky, chart, constellation, month Newton, life, law, motion, gravity, light, reflecting, telescope
Anonymous	Isaac Newton (1642-1727)	10	1942	borealis, aurora, polar, Northern, Southern,
Anonymous	The Northern and Southern Lights	10	1942	observe, sky, glow
Anonymous	The Changing Moon	11	1942	GO, Planetarium, show
Anonymous	Star Trails of Orion	11	1942	Orion, telescope, photo
Bunton, George W.	Lightning	12	1942	Lightning, thunder, storm, strike, electricity, conduct
Anonymous	Mariners' Mercator Maps	12	1942	Mercator, map, navigation, sphere, distance
-	Index to Volume VI, 1942	12	1942	GO, index
Anonymous	Six Years of the Griffith Observer	1	1943	GO photograph, Halley, Andromeda, Cygnus, Mars, Saturn, Jupiter, Moon, Orion, Hercules
-	Photos	1	1943	telescope, photography, color, plate, red, light
Herbig, George H.	Advances in Astronomical Photography	2	1943	
Cleminshaw, C. H.	Two Eclipses in February	2	1943	sun, solar, eclipse, total, lunar, moon
Cleminshaw, C. H.	The New Comet	2	1943	Whipple, comet, discovery, Harvard
	Celestial Navigation			celestial, navigation, declination, time, zone, equinox, zenith, azimuth, altitude
Cleminshaw, C. H.	(Planetarium Subject for March)	3	1943	
Cleminshaw, C. H.	The World Calendar	4	1943	world, calendar, new, benefit Astrology, law, superstition, sign, planet, horoscope, fraud
Cleminshaw, C. H.	Astrology	4	1943	Copernicus, Ptolemaic, sun, earth, center, revolution
Cleminshaw, C. H.	Copernicus Moves the Earth	5	1943	
-	Index of Principal Articles in Griffith Observer	5	1943	GO, Index
Cleminshaw, C. H.	Prominences and Sunspots	6	1943	sun, sunspot, flare, prominences, observe, atmosphere, Schwabe
Cleminshaw, C. H.	Navigational Stars	6	1943	navigation, sidereal, equinox, chart
Alter, Dinsmore	The South Seas Sky	7	1943	GO, war, service, observe, sky, equator, ocean, life
Cleminshaw, C. H.	Little Planets by the Thousands	7	1943	asteroid, Wittenberg, discovery, Piazzi, Olbers, name, Eros, Jones
Pettit, Edison	Watches and Chronometers	8	1943	time, chronometer, watch, movement, clock, gear, jewel, wound
Cleminshaw, C. H.	Trails of Circumpolar Stars	8	1943	star, circumpolar, North
	The Galaxies of Space			Star, Polaris, photography, exposure
Anonymous	(Planetarium Show for August)	8	1943	GO, Planetarium
	Can Science Predict			earthquake, fault, California, predict, fore
Clements, Thomas	Earthquakes?	9	1943	shock

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Cleminshaw, C. H.	Other Solar Systems	9	1943	planet, sun, extra solar, Sirius, binary, Cygni, companion, Ophiuchi, Cincinnati
Cleminshaw, C. H.	A Typical Oil Field	9	1943	GO, exhibit, oil, well
Herbig, George H.	Peculiar Stars	10	1943	Capella, Aurigae, bright, dark, companion, Lyrae, Kuiper, egg, contact, Tauri, Joy
Baumgardt, Mars F.	Saturn, The Ringed Giant	11	1943	Saturn, observe, sky, temperature, Galileo, ring, period
Cleminshaw, C. H.	How to Find the Planets	11	1943	diagram, sky, observe, opposition, brightness, Mars, Venus
Locher, Felix	Great Circles On Mercator Maps	12	1943	short, distance, two, points, curved, equation, Berlin, Tokyo, Fairbanks
-	Index to Volume VII, 1943	12	1943	GO, index
	Selenographer: Student of the Moon	1	1944	selenographer, Moon, sun, surface, illumination, surface, feature
Williams, Millard	Jupiter's Four Bright Satellites	1	1944	Jupiter, satellite, Galileo, eclipse, transit, observe, sky, light, speed
Bunton, George W.	The Earth a Great Magnet	2	1944	magnet, earth, pole, magnetic field, compass, Halley, sunspot, cycle
Cleminshaw, C. H.	Leap Year	2	1944	Leap year, Julian, calendar, Gregorian, Church, Easter
Cleminshaw, C. H.	Saturn's Satellites	3	1944	Saturn, satellite, Huygens, Titan, atmosphere, methane, Iapetus, observe
Cleminshaw, C. H.	Time Around the World	3	1944	time, zone, meridian, Greenwich Civil time, war time, daylight savings
	The Sun's Daily Path Across the Sky	3	1944	sun, position, altitude, azimuth, calculate
Newton, Archie M.	The History of the Telescope	4	1944	Lippershey, telescope, convex, lens, magnify, discovery, Galileo, Kepler, Scheiner, Gregory, reflector, Cassegrain, observatory, refractor, Lick, Hooker star, interferometer, Michelson, angular diameter, linear diameter, Alpha Centauri, Canopus, distance, brightness, luminosity, Vega, Betelgeuse, etc.
Cleminshaw, C. H.	Facts About Some Notable Stars	5	1944	Moon, orbit, earth, eccentricity, diameter, parallax, altitude, face, observe, sky, phase
Cleminshaw, C. H.	The Motions of the Moon	6	1944	observe, sky, Milky Way, galaxy, Deneb, photograph, composite, nebulae
Cleminshaw, C. H.	The Milky Way	7	1944	GO, Foucault, pendulum, exhibit
Bunton, George W.	The Foucault Pendulum	8	1944	GO, quiz, knowledge, Astronomy
Anonymous	An Astronomical Quiz	8	1944	time, sidereal, earth, intersection, sun, ascension, sky, ecliptic, equation, mean
Cleminshaw, C. H.	Sun Time	9	1944	nebula, galaxy, Andromeda, dust
Cleminshaw, C. H.	Two Kinds of Nebulae	10	1944	earth, rotate, angular, momentum, deviation, motion, centrifugal, axis
Bunton, George W.	The Earth Rotates	10	1944	luminosity, BD+4, close, S Doradus, double, observe
	Stars of the Lowest and Highest			
Cleminshaw, C. H.	Luminosity	10	1944	

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Cleminshaw, C. H.	Modernized Mercator Maps for the Air Age	11	1944	Mercator, map, telecurve, distance, short, circle, great
Herbig, George H.	Light from Comets	11	1944	comet, reflect, sunlight, spectroscope, graph, makeup, element, Doppler
Herbig, George H.	Direction of Rotation of Galaxies	12	1944	velocity, galaxy, radial, tilt, spiral, Andromeda
Cleminshaw, C. H.	Measuring the Speed of Light	12	1944	speed, light, Galileo, velocity, Roemer, Jupiter, revolution, satellite, Bradley, Fizeau, Cornu, Foucault, Michelson, Mount Wilson
-	Index to Volume VIII, 1944	12	1944	GO, index
Bunton, George W.	The Origin of Spectra	1	1945	spectra, white, light, formula, frequency
	Daily and Seasonal Movements			
Anonymous	of the Sun	1	1945	Sun, sky, observe, GO, photograph
Anonymous	The Planets	2	1945	Venus, Sun, conjunction, Mercury, Kepler, Halley's, comet, Jupiter, Saturn
Anonymous	Maps of the Sky	3	1945	sky, observe, chart, constellation, myth
Bunton, George W.	Clouds	4	1945	cloud, vapor, water, temperature, Cirrus, type
Anonymous	A Portable Sundial	4	1945	sundial, create, amateur, design
Anonymous	Tenth Anniversary of the Griffith Observatory and Planetarium	5	1945	GO, anniversary, Griffith
Bunton, George W.	Storms	5	1945	storm, type, thunder, magnetic, atmosphere
Herbig, George H.	The Rotation of the Stars	6	1945	rotation, observe, sky, diameter, velocity, spectral, line
Anonymous	The Solar Eclipse of July 9	6	1945	Sun, Moon, eclipse, observe, sky, total star, nova, Crab, Persei,
Anonymous	Exploding Stars	7	1945	light, curveAquilae, telescope, Fabricius, Bayer, variable, Mira, Goodricke, Cephei, light, temperature
Anonymous	Variable Stars	8	1945	observe, sky, identify, Dipper, map, constellation
Anonymous	How to Recognize the Stars	9	1945	construction, Palomar, mirror, Hale
Anonymous	The Palomar Telescope	10	1945	observe, planet, sky, telescope
Anonymous	The Moving Planets	10	1945	glass, mirror, prism, construction, Warner and Swasey
Nassau, J. J.	The Objective Prism of the Warner and Swasey Observatory	11	1945	Cincinnati, Mitchel, found, glass, mirror, Russia
Anonymous	The Founding of the Cincinnati Observatory	11	1945	
Anonymous	Tycho and Kepler	12	1945	Brahe, Kepler, telescope, orbit, planet, law
Poincare, H.	The Value of Astronomy	12	1945	government, funding, curiosity, value
Alter, Dinsmore	Atoms, Bombs and the Moon	1	1946	Moon, Mars, life, atomic, bomb, development, Curie, Schmidt, Millikan, Bohr, neutron, Chadwick, space, travel, comic
Williams, Millard	The Existence of Air and Water on the Moon in Ancient Times	2	1946	Moon, atmosphere, water, air, feature, past, sea

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Hynd, Alan	Theatre of the Skies	2	1946	Hayden Planetarium, war, classroom, navigation, celestial
Pruett, J. Hugh	The Twilight Meteor of November 29, 1945	3	1946	meteor, sky, observe, California, fireball, aerolite
Newton, Archie M.	The Earliest (?) Astronomical Instrument	4	1946	Egypt, Nile, Merkhet, archaeologist, Berlin, temple, Pharaoh
Richards, Carl	The 1945 Total Eclipse of the Sun	4	1946	sun, eclipse, total, observe, photograph
Price	The Past, Present, and Future of the Los Angeles Astronomical Society	5	1946	Porter, amateur, astronomy, society, Los Angeles, telescope, make
Bunton, George W.	The 100th Anniversary of the Discovery of Neptune	5	1946	Neptune, discovery, Uranus, Herschel, Adams, Leverrier
Anonymous	Measuring Astronomical Distances - In the Solar System (Part 1 of 2)	6	1946	Egypt, Eratosthenes, zenith, telescope, displacement, angle, Moon, Venus, equation, light, aberration
Anonymous	Measuring Astronomical Distances - Beyond the Solar System (Part 2 of 2)	7	1946	Greece, Aristarchus, parallax, Alpha Centauri, parsec, magnitude, Russell
Anonymous	The Sun's Daily Path Across the Sky	7	1946	sun, position, altitude, azimuth, calculate sunspot, sun, flare, solar, magnet, storm, cycle
Williams, Millard	One Thousand Observations of the Sun	8	1946	Sun, surface, GO, drawing, observe, catalog
Anonymous	The Surface of the Sun	8	1946	Moon, travel, radar, atomic, power, shape, fuel
Alter, Dinsmore	To the Moon?	9	1946	Venus, sky, observe, position, equation, inferior
Cleminshaw, C. H.	Venus in the Evening Sky Program for Planetarium Show, September, 1946: How to Recognize the Stars	9	1946	GO, planetarium show
Anonymous	The Milky Way Galaxy	10	1946	Herschel, milky way, visible, observe, sky, galaxy, position, Sun
Cleminshaw, C. H.	A Possible Meteor Shower Program for the Planetarium Show, October 1946: The Milky Way	10	1946	Meteor, shower, observe, sky, comet, Giacobini-Zinner, Leonid
Anonymous	The Meteor Shower of October 9, 1946	10	1946	GO, planetarium
Cleminshaw, C. H.	Using the Moon to Measure Stars	11	1946	meteor, shower, observe, GO, sky, photo
Cleminshaw, C. H.	Living on the Moon Program for Planetary Show, November 1946: The Moon	11	1946	Moon, Wilson, interferometer, occultation
Anonymous	The Pleiades Historical Meteor Showers Compared: Recent Display Ranks Well	12	1946	Moon, voyage, commercial, rules, life, living, corona, meteor
Cleminshaw, C. H.	The Pleiades Historical Meteor Showers Compared: Recent Display Ranks Well	12	1946	GO, planetarium
Pruett, J. Hugh				Pleiades, constellation, Taurus, sisters, magnitude
				meteor, shower, slave, past, count, estimate, number

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Anonymous	Program of Planetarium Show for December, 1946: Our Star, The Sun	12	1946	GO, planetarium
-	Index to Volume X, 1946	12	1946	GO, index
Alter, Dinsmore				
Cleminshaw, C. H.	The Fireball of May 9, 1947	8	1947	meteor, fireball, Los Angeles, impact
Anonymous	The Great Siberian Meteorite of 12 February 1947	8	1947	meteorite, Siberia, Soviet Union
Holmes, Burton	Boyhood Memories of George Ellery Hale	9	1947	Hale, cruise, memories
Mason, Max	The 200 -Inch - An Experience in Cooperation	9	1947	Hale, Wilson, telescope, Palomar, McDowell
Cleminshaw, C. H.				
Bunton, George W.	The Foucault Pendulum	10	1947	GO, Foucault, pendulum, exhibit
Cleminshaw, C. H.	The Planets	10	1947	distance, planet, Sun, magnitude, density
Cleminshaw, C. H.	The Nebulae of Our Galaxy	11	1947	nebula, galaxy, cloud, spectra, planetary
Alter, Dinsmore	Sunspot Observations Before the Invention of the Telescope	11	1947	sun, sunspot, Wolf, telescope, Galileo
Alter, Dinsmore	Analyses of the Records of Sun Spottedness	11	1947	Sun, sunspot, interval, Schwabe
Alter, Dinsmore	The Planetarium as a University Classroom	12	1947	Planetarium, college, atomic bomb, Zeiss
Alter, Dinsmore	John Flamsteed and His Atlas Coelestis	12	1947	Flamsteed, atlas, Coelestis, Brahe, England, Newton, position
Alter, Dinsmore	The Schmidt Telescope or Camera	1	1948	telescope, mirror, Schmidt, reflector, axis, diagram
	Planetarium Show for January, 1948: A Preview of the 1948			Moon, phase, eclipse, Mercury, Venus, Mars, Jupiter, Saturn, observe, sky, planetarium
Cleminshaw, C. H.	Sky	1	1948	galaxy, star, data, distance, bright, size, velocity, motion
Cleminshaw, C. H.	Stellar Data	1	1948	
Rule, Bruce				
Hendrix, Don Alter, Dinsmore	The 48-Inch Schmidt Camera of the Mount Palomar Observatory	2	1948	Palomar, telescope, Schmidt, mirror, design, diagram
	The Satellites of the Solar			satellite, Jupiter, Saturn, Galileo, Huygens,
Cleminshaw, C. H.	System	3	1948	Uranus, Neptune, Mars, moon
	From Other Observation Platforms: "O wad some power the giftie gie us To see ousrels as others see us!"			sky, observe, telescope, Pluto, Jupiter, Mercury
Alter, Dinsmore		3	1948	Tesla, coil, GO, diagram, magnetic, field, exhibit
Bunton, George W.	The Tesla Coil	4	1948	GO, Newton
Alter, Dinsmore	Mr. Newton Retires	4	1948	
	Discovery of the Fifth Uranian Satellite	4	1948	satellite, Uranus, Kuiper
Alter, Dinsmore	The Changing Tides	5	1948	Moon, tide, Earth, gravity, pull, low, high, average

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Cleminshaw, C. H.	Total Solar Eclipses in the United States from 1900 to 2050	5	1948	Sun, Moon, eclipse, total, observe, sky, United States
Alter, Dinsmore	A Unique Asteroid	5	1948	asteroid, Wirtanen, Lick, Hidalgo
	The Names of the Forty			bright, star, Bayer, Flamsteed, Sirius,
Cleminshaw, C. H.	Brightest Stars	6	1948	Vega, Canopus
Alter, Dinsmore	Sidelights on Isaac Newton	6	1948	Newton, England, library, life, Trinity
Alter, Dinsmore	The Dedication of the Hale Telescope	7	1948	Hale, dedication, telescope, Wilson, Palomar
Cleminshaw, C. H.				Adams, telescope, knowledge, quest, search, mankind, Palomar
Fosdick, Raymond B.	The Challenge of Knowledge	7	1948	
	A Trip to the Moon: A Spectacle to be Produced on the Dome of the Planetarium at the Griffith Observatory			
Anonymous		7	1948	GO, Moon, planetarium
	A Trip to the Moon: And the Apparatus Which Produces It	8	1948	GO, Moon, Planetarium, projector, design
Mason, Max	Man and Matter	8	1948	Hale, future, Universe
Dubridge, Lee A.	The Palomar Observatory	8	1948	Palomar, telescope, 200, Hubble, Adams, observatory
Cleminshaw, C. H.	The 150 Brightest Stars	9	1948	star, bright, luminosity, constellation
	Two Observatories Operate as One	9	1948	Palomar, Wilson, telescope, Hale, Bowen
Bush, Vannevar				Moon, Earth, evolution, how, Darwin, distance
Alter, Dinsmore	The Evolution of the Moon	10	1948	atmosphere, Earth, upper, layer, absorption, radio, temperature
Alter, Dinsmore	The Upper Atmosphere of the Earth	10	1948	Hale, test, observatory, telescope, spectrum, work
Bowen, Ira S.	The Telescope at Work	10	1948	Algol, binary, double, star, eclipse, light curve, equation
Cleminshaw, C. H.	Eclipsing Double Stars	11	1948	future, mankind, Langley, flight, space
Alter, Dinsmore	The Future of Our Race	11	1948	Christmas, star, Jesus, birth, comet, Bethlehem, Halley
Alter, Dinsmore	The Christmas Star	12	1948	Earth, photo, atmosphere, Navy, flight
Alter, Dinsmore	The Third Planet	12	1948	
	Index of Articles in the Griffith Observer (Feb. 1937 - Dec. 1948)	12	1948	GO, index
Nicholson, Seth B.	The Zurich Meeting of the International Astronomical Union	1	1949	Astronomical Union, Zurich, commission, Switzerland
Cleminshaw, C. H.	The Moon and Planets in 1949	1	1949	Venus, Mercury, Mars, Jupiter, Saturn, Uranus, Neptune, Moon, observe, sky, telescope
Anonymous	The Adjustment of the Hale 200-inch Telescope at Palomar	1	1949	Palomar, telescope, adjust, mirror
Cleminshaw, C. H.	Weighing the Sun	2	1949	Newton, gravity, Sun, Earth, weight, mass, equation, density
Alter, Dinsmore	Why Force Toward the Sun Takes a Planet Around the Sun	2	1949	Sun, force, mass, satellite, orbit, focus

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Alter, Dinsmore	The Creed of Science	2	1949	creed, believe, science, metaphysics
Alter, Dinsmore	The Importance and Nature of the Asteroids	3	1949	asteroid, Jupiter, Eros, Earth
Brouwer, Dirk	The Work of Commission 20 of the International Astronomical Union	3	1949	minor planet, commission, union, comet, position, orbit, asteroid
Herget, Paul	Cooperation on Asteroid Problems	3	1949	danger, asteroid, cooperation, find, observe, opposition
Cunningham, Leland E.	Determination of Asteroid Orbits	3	1949	asteroid, orbit, Ceres, Piazzi, perturb, definitive, calculator, binary celestial, sphere, constellation, sky, observe, telescope, horizon, meridian
Cleminshaw, C. H.	A Start on the Stars	4	1949	
	The Performance of the Hale Telescope	4	1949	Hale, telescope, work, adjustment, mirror
Alter, Dinsmore	Russell W. Porter	5	1949	Porter, Vermont, Wilson, Hale, death
Alter, Dinsmore	Clyde Fisher	5	1949	Fisher, death, teach, GO
Baumgardt, Mars F.	The Los Angeles Astronomical Society	6	1949	Los Angeles, society, amateur, telescope, reflector
	The Los Angeles Astronomical Society: Present Activities and Future Plans	6	1949	Los Angeles, society, activities, amateur, future, observe, telescope, cultural
Freeman, H. L.	Space Travel Projectors: A novel type of planetarium show produced by a new instrument	7	1949	GO, planetarium, instrument, projector, Zeiss
Alter, Dinsmore	Cave, Thomas R.	7	1949	
Cragg, Thomas A.	A Recent Observation of Saturn	7	1949	Saturn, observation, drawing, ring
Alter, Dinsmore	A Close Red Dwarf Double Star Observational Programs for Amateur Astronomers	7	1949	red, dwarf, binary, motion, proper amateur, telescope, observe, program, build, zodiac, meteor
Alter, Dinsmore	Amateur Astronomers	8	1949	parallax, near, star, visual, magnitude, real, motion, spectra, velocity
Cleminshaw, C. H.	The Forty Nearest Stars	8	1949	
	The Big Schmidt and the National Geographic Society - Palomar Observatory Sky Survey	9	1949	Palomar, Geographic., sky, survey, Lick, Schmidt, Hale, red, nebula
Alter, Dinsmore	Bunton, George			
W. Freeman, Harry L.	The First Annual Conference of Western Amateur Astronomers	10	1949	Western, amateur, conference, telescope, build, observe, sky
	The Retrograde Motions of the Planets	10	1949	retrograde, planet, orbit, Earth, Mars, equation, Saturn, Neptune
Cleminshaw, C. H.	Origin of the Solar System: Some facts which must be explained by any satisfactory hypothesis	11	1949	Earth, formation, universe, solar system, Sun, temperature, planet, orbit
Alter, Dinsmore				Moon, observe, sky, path, position, solstice, ecliptic, phase
Cleminshaw, C. H.	The Moon's Path in the Sky	12	1949	Universe, Hubble, distance, expand, light, electromagnetic, spectra, Doppler
Alter, Dinsmore	The Expanding Universe (Part 1 of 2)	1	1950	
Anonymous	200-Inch Telescope Again in Operation	1	1950	telescope, Hale, mirror, Ross, corrector
	The Expanding Universe (Part 2 of 2)	2	1950	Universe, Doppler, expand, Wilson, Hubble, luminosity, Hale
Alter, Dinsmore				

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Alter, Dinsmore	Griffith Observatory Traveling Telescope	2	1950	telescope, GO, travel Siberian, meteorite, observe, Willamette, Benld, Paragould, Kansas, Oregon,
Cleminshaw, C. H.	Stories Of Meteorites	3	1950	shower, Soviet Union
	The Energy of the Sun (Part 1 of 2)	4	1950	Sun, energy, contraction, heat, caloric, Langley, Helmholtz Hydrogen, bomb, Sun, mass, Einstein, atom, fission, deuterium, uranium
Alter, Dinsmore	The Sun as a "Hydrogen Bomb" (Part 2 of 2)	5	1950	alien, pseudoscience, UFO
Alter, Dinsmore	The Flying Saucers	5	1950	supernova, Venus, Hipparchus, Tycho, magnitude, Humason, nebula atom, particle, Becquerel, cloud, chamber, Wilson, electron, neutron, proton, neutrino
Cleminshaw, C. H.	Supernovae	6	1950	ASP, society, Pacific, Holden, Lick, Leuschner, Newcomb
Alter, Dinsmore	The Particles of Physics	7	1950	convention, Western, amateur, Palomar
Aitken, Robert G.	The Origin of the Astronomical Society of the Pacific	8	1950	sundial, equation, geometry, time Icarus, asteroid, Baade, orbit, magnitude, discovery
Wallace, H. A.	Second Convention of Western Amateur Astronomers	8	1950	Canada, crater, meteorite, iron convention, Western, amateur, Astronomical Society of the Pacific, committee
Vann, Marvin J.	The Unique Asteroid, Icarus A Possible Large Meteoritic Crater in Canada	9	1950	amateur, photometry, Hipparchus, equation, magnitude, brightness, circuit, build
Baum, William A.	The Second Annual Convention of Western Amateur Astronomers	10	1950	photo, Wilson, Palomar, galaxy
Anonymous	Amateur Photometry New Photographs of Galaxies (Made by Mount Wilson and Palomar Observatories)	11	1950	Mercury, sky, observe, position, Venus, Mars, conjunction, Jupiter, Saturn
Cleminshaw, C. H.	Planet Positions 1951-1960 Some New Photographs of Galactic Objects (Made with the 200" Hale Telescope of the Mount Wilson and Palomar Observatories)	1	1951	Hale Telescope, observe, photo, reflection, nebula, spectra, Trifid, Lagoon, Omega, Lyra creed, science, daily, fact, discovery, invention, metaphysic
Alter, Dinsmore	Science and Our Daily Lives	2	1951	Mars, amateur, observe, sky, telescope, canal, Ross
Cave, Thomas R.	The Problem of Mars (A Program for the Amateur)	3	1951	Halo, Sundogs, sun, Moon, crystal, light planet, size, magnitude, Venus, Mercury, Moon,
Bunton, George W.	Sundogs and Halos	4	1951	transit, Jupiter, Saturn, distance
Cleminshaw, C. H.	The Apparent Sizes and Magnitudes of the Planets	5	1951	

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Roques, Paul E.	The Penumbral Lunar Eclipse of 1951, March 23	5	1951	Moon, eclipse, penumbral, umbra, observe
Alter, Dinsmore	Future Scientific Training and Research	6	1951	inventor, science, future, Athenian, student club, North Hollywood, telescope, observe, sky
Alter, Dinsmore	Boys Astronomy Club at North Hollywood Playgroud	6	1951	
Cleminshaw, C. H.	The Founding of Three Great Observatories by George Ellery Hale (Part 1 of 2)	7	1951	Hale, observatory, telescope, found, Kenwood, Yerkes, Wilson
Cleminshaw, C. H.	The Founding of Three Great Observatories by George Ellery Hale (Part 2 of 2)	8	1951	Hale Telescope, observatory, Carnegie, reflect, Hooker
Alter, Dinsmore	Numerology and Science	9	1951	Bode, numerology, Germany, pseudoscience, superstition
Custer, C. P.	The Stockton Astronomical Society	9	1951	Stockton, society, club, telescope, observe, sky
News Release from Caltech	Results from the 200" Hale Telescope	9	1951	Humason, red shift, Virgo, Doppler, distance, Cepheid, cosmology
Cave, Thomas R.	Third Annual Convention - Western Amateur Astronomers	10	1951	Western amateur convention, telescope, observe, sky, San Diego
Killick, Victor W.	Conquest of Space Exhibition at Sacramento	11	1951	Sacramento, model, exhibition, Crocker, scale, solar system
Wylie, Paul E.	The Timing of the Moon's Phases	11	1951	Moon, phase, year, time, orbit
Alter, Dinsmore	The 120-Inch Telescope	12	1951	Lick, construction, telescope, Palomar, Cassegrainian
Alter, Dinsmore	The Story of Pluto	1	1952	Pluto, discovery, Watson, Herschel, Uranus, Bessel, Bode, Lowell, Leverrier, Tombaugh
Cleminshaw, C. H.	Some Notable Asteroids	2	1952	asteroid, Ceres, Pallas, Juno, Vesta, discovery, Eros, Apollo
Merrill, Paul W.	Robert Grant Aitken 1864- 1951	3	1952	Aitken, Lick, death, double, binary, star, survey
Abell, George O.	The Millikan Oil Drop Experiment	3	1952	Grease, element, proton, electron, oil, drop, experiment, Millikan, charge
Alter, Dinsmore	The Upper Atmosphere of Earth	4	1952	Earth, atmosphere, Ionosphere, chemosphere, radiation, mesosphere, exosphere, density
Nicholson, Seth B.	The Satellites of Jupiter	5	1952	Jupiter, Copernicus, Galileo, Italy, zodiac, discovery, revolution, orbit, satellite
Cleminshaw, C. H.	Satellites of the Earth	6	1952	satellite, Earth, equation, artificial, velocity, period
Merrill, Paul W.	The Last Adventures of a Starbeam	6	1952	light, telescope, mirror, reflector, refractor, spectroscopy, Humason
Abell, George O.	Two Populations of Stars	7	1952	light, star, galaxy, elliptical, Milky Way, spiral, nebula, cluster, Hertzsprung-Russell,
Alter, Dinsmore	A Century of Change	8	1952	Herschel, observation, modern, compare, light, future, sun
Alter, Dinsmore	Huge Model of Copernicus	8	1952	GO, Copernicus, exhibit

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Cleminshaw, C. H.	Stories of the Constellations	9	1952	constellation, myth, stories
	Advantages of a Lunar Observatory	10	1952	Moon, observatory, satellite, atmosphere, light
Alter, Dinsmore				amateur, Marin, group, observe, sky, telescope
Osborn, Irene D.	Marin Amateur Astronomers	10	1952	magnitude, brightness, difference, ratio, parallax, distance
Cleminshaw, C. H.	Magnitudes of the Stars	11	1952	UFO, saucers, pseudo, fireball, planet, life, alien
	What I Don't Know About Flying Saucers	12	1952	amateur, Herschel, Bond, discovery, public, learn
Struve, Otto	The Place of the Amateur in Astronomy	12	1952	telescope, radio, Navy, star, design, reflector
Struve, Otto	The 600-Inch Radio Telescope of the United States Navy	12	1952	amateur, Jupiter, cloud, feature, Red Spot, observe
Anonymous	Some Long-Enduring Features in the South Temperate Zone of			Mars, canal, Schiaparelli, interpretation, Williams, Lowell
Haas, Walter H.	Jupiter	1	1953	temperature, Jupiter, Bond, Wildt, atmosphere
Cave, Thomas R.	The Canals of Mars	2	1953	Planetarium, San Francisco, Zeiss
Alter, Dinsmore	The Temperature of Jupiter	2	1953	eclipse, corona, Sun, Moon, occultation, planetarium
Bunton, George W.	Stars Over San Francisco	3	1953	equation, Kepler, orbit, comet, Saturn, Mars, velocity
	Eclipses: Planetarium Show for March	3	1953	Wilson, Sun, observe, telescope, daily galaxy, star, Hubble, parallax, telescope, Cepheid, spiral, proper, motion, rocket, station, satellite, diagram, hazard, fuel
Alter, Dinsmore	Celestial Speeds Daily Solar Observations at Mt. Wilson	4	1953	meteor, Neenach, Antelope Valley, recovery
Nicholson, Seth B.	Astronomers Revise Astronomical Distances	5	1953	Moon, surface, temperature, change, atmosphere, albedo
Abell, George O.	Artificial Satellite or Space Station	6	1953	Sun, observe, monochromator, Lyot, telescope, corona, spectrum, photo
Alter, Dinsmore	The Neenach, Los Angeles County, Aerolite	7	1953	Centauri, telescope, observe, Barnard, Sirius, motion
Radio Broadcast	General Conditions at the Moons Surface	7	1953	Leuschner, Lick, Hamilton, orbit
Alter, Dinsmore	The Lyot Telescope & Monochromator	8	1953	life, alien, temperature, molecules, energy, Jupiter, Saturn
Pettit, Edison		9	1953	Mercury, transit, conjunction, sky, observe, telescope
Cleminshaw, C. H.	The Six Nearest Stars	9	1953	photography, composite, prism, color, surface
Nicholson, Seth B.	Armin O. Leuschner 1868- 1953	10	1953	sky, telescope, observe, Moon, Mercury, Venus, Mars, Jupiter, Saturn
Thorson, W. R.	Life on Other Worlds	10	1953	Moon, photo, identification, crater, coordinate
Cleminshaw, C. H.	Transits of Mercury	11	1953	
Zwicky, F.	Composite Photography In Astronomy	12	1953	
Cleminshaw, C. H.	The Moon and Planets in 1954	1	1954	
	Identification of Lunar Features (Part 1 of 3)	2	1954	

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News Release from Palomar	The Distance of Messier 81 The Waxing Moon: Hints to Beginning Telescope User (Part 2 of 3)	2	1954	Messier 81, M81, galaxy, Milky Way
Alter, Dinsmore		3	1954	Moon, observe, sky, telescope, phase, crater, terminator
Cleminshaw, C. H.	The Scale of Space	4	1954	space, size, scale, Moon, Sun, Alpha Centauri, comet, galaxy, cluster
Alter, Dinsmore	The Waning Moon (Part 3 of 3)	5	1954	Moon, phase, crater, full, observe, photo, terminator
Mawhinney, Les	The Oberamtman Observer	5	1954	Moon, Schroter, Germany, Mars, Oberamtman, Venus,
Alter, Dinsmore	Mars	6	1954	Surface, Mars, Fontana, Hooke, Herschel, mass, orbit, feature
Cleminshaw, C. H.	Meteoritics and Meteorology	6	1954	meteor, shower, rain, cloud, noctilucent
Cleminshaw, C. H.	The Wandering of the Pole	7	1954	Pole, North Star, Polaris, precession, celestial, equinox, ascension
Alter, Dinsmore	Tides Today and Through The Ages	8	1954	tide, ocean, Moon, zenith, force, Newton, nodes, apsides
Cleminshaw, C. H.	Chasing an Eclipse	8	1954	Eclipse, Sun, Moon, clouds, observe, telescope, corona, sky
Mawhinney, Les	Doctors and Lawyers	8	1954	Medicine, Fernel, doctor, Olbers, lawyer, Bayer, Rutherford
Kennedy, John R.	Shooting the Eclipse	9	1954	eclipse, Sun, Moon, observe, telescope, photo, total
Alter, Dinsmore	The Beginnings of Astronomical Photography	9	1954	Herschel, Sigma, Kodak, Schulze, photo, camera
Mawhinney, Les	The Astronomical Artist	9	1954	artist, Goldschmidt, Germany, observe, telescope
Cleminshaw, C. H.	Sidereal Time	10	1954	time, Sun, star, equation, vernal, equinox, meridian
Reaves, Gibson	Columbus Thought it Was Small	10	1954	Grease, Columbus, Aristotle, Earth, size, round, Spain, navigation
Reaves, Gibson	The Great Moon Hoax of 1835	11	1954	Moon hoax, alien life, pseudoscience, Doppler, Kirchhoff, New York Sun, Locke
Cave, T. R.	The Sixth Annual Convention "of Western Amateur Astronomers"	12	1954	Convention, Western, amateur, Oakland, meet
Alter, Dinsmore	Sunrise and Sunset on the Moon	12	1954	Sun, Moon, rise, set, colongitude, terminator, latitude
-	Index of Articles in Griffith Observer (Jan., 1949 - Dec. 1954)	12	1954	GO, index
Cleminshaw, C. H.	Jupiter's Four Brightest Satellites	1	1955	orbit, revolve, Jupiter, eclipse, observe, occultation, sky, telescope
Cleminshaw, C. H.	The Moon and Planets in 1955	1	1955	Moon, Mercury, Mars, Venus, Jupiter, Saturn, observe, sky, Uranus, Neptune, Pluto, telescope
Alter, Dinsmore	The Astronomical Meetings at Berkeley	2	1955	Berkeley, meeting, result, discussion

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Wheeler, Burritt	How I Wonder What You Are	2	1955	telescope, star, observe, build, astronomy decline, comet, Halley
Mawhinney, Les	A Reporter Looks At Astronomy	2	1955	amateur, study, imagination, curiosity, velocity
Alter, Dinsmore	Copernicus Through the Month	3	1955	Copernicus, crater, moon, observe, telescope, intelligence, life
Anonymous	The Great Andromeda Galaxy	3	1955	Andromeda galaxy, Milky Way
Mawhinney, Les	Eclipse Journeys	3	1955	eclipse, India, observe, Janssen, total, observatory, travel
Cleminshaw, C. H.	Zeta Aurigae	4	1955	spectrum, observe, telescope, Zeta, Aurigae, Doppler, velocity
Barker, H. G.	Herstmonceux Castle	5	1955	Castle, Henry VI, England, Herstmonceux, Greenwich
Alter, Dinsmore	Above the Limb of the Moon	5	1955	Moon, Wright, photo, Mare Crisium, Grimaldi
Alter, Dinsmore	Tycho Through the Month	6	1955	Tycho, crater, Moon, observe, telescope
Roques, Paul E.	A Solar Eclipse Viewed from the Moon	6	1955	GO, Moon, eclipse, projector, Planetarium
Alter, Dinsmore	Local Boys Make Good: Twenty Years of Griffith Observatory Guides	6	1955	GO
Mawhinney, Les				interstellar, matter, dark, nebula, absorption, reddening, reflection, gas, Hydrogen, Emission
Abell, George O.	The Matter Between the Stars	7	1955	Saturn, ring, satellite, Herschel, Galileo, Laplace, spectrum, temperature
Cleminshaw, C. H.	Saturn	8	1955	England, Cambridge, Scotland Yard, Chaucer, Astrolabe
Greever, Garland	Scotland Yard Invades Medieval Astronomy	9	1955	
News Release from Caltech	Photographic Atlas of the Sky	9	1955	Atlas, sky, space, survey, Palomar
Custer, Clarence P.	Seventh Annual Convention of Western Amateur Astronomers	10	1955	Western, amateur, convention, report, telescope
Cleminshaw, C. H.	A Constellation Quiz	11	1955	constellation, quiz, zodiac, Andromeda, galaxy, Ursa
	Giordano Bruno and the Infinite Universe	12	1955	Bruno, infinite, universe, Copernicus, type
Hollister, Warren	The Twin Refracting Telescope	12	1955	telescope, refractor, Griffith, GO, Zeiss
Alter, Dinsmore				light, electricity, sun, solar, power, photometer
Roques, Paul E.	Changing Starlight to Electricity	12	1955	
Cleminshaw, C. H.	Daylight and Twilight	1	1956	Earth, time, Sun, calendar, twilight, equator
News Release from Caltech	Evolution of the Stars	1	1956	cosmic, explosion, element
Alter, Dinsmore	This New World We Live In	2	1956	World War II, bomb, Hydrogen, peace, physics, Moon
Alter, Dinsmore	Sunset on Ptolemaeus	2	1956	Ptolemaeus, Moon, crater, observe, telescope
Hagar, Charles F.	The Zeiss Planetarium	3	1956	Planetarium, Zeiss, GO, Huygens, Bauersfeld, diagram, working
Cleminshaw, C. H.	The Big Dipper	4	1956	Dipper, Big, North Star, Polaris, observe, telescope, sky, galaxy, Ursa, nebula
Alter, Dinsmore	Correction of Lunar Foreshortening	5	1956	foreshorten, Moon, photo, observe, telescope, crater

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Cleminshaw, C. H.	The Story of Mars	6	1956	Mars, revolve, Sun, distance, conjunction, atmosphere, canal
Alter, Dinsmore	Comets and People Walter Sydney Adams: 1876	7	1956	comet, superstition, pseudoscience, death, Halley, panic
Alter, Dinsmore	December 20-1956 May 11	8	1956	
Alter, Dinsmore	The Artificial Satellite	8	1956	Germany, V-2, rocket, satellite, artificial
Alter, Dinsmore	The August Meteors	8	1956	meteor, shower, Perseid, fireball
Cleminshaw, C. H.	The Twenty Brightest Stars	9	1956	Rigel, Betelgeuse, Sirius, luminosity, size, data
Cragg, Thomas A.	The Flagstaff Conventions: 1956 August 28 - September			
Alter, Dinsmore	1	10	1956	convention, Flagstaff, Arizona, telescope, talks, party
-	The People Present at Flagstaff Convention	10	1956	Photo
Roques, Paul E.	Extensive Cloud Activity on Mars	10	1956	telescope, Mars, atmosphere, cloud, activity
Alter, Dinsmore	The Lunar Eclipse of 1956 November 17	11	1956	Moon, eclipse, observe, GO, sky, telescope
Cleminshaw, C. H.	A Star's Daily Path Across the Sky	11	1956	zenith, star, sky, meridian, daily
Davis, Watson	Man Not Alone in Universe, Astronomers Say	11	1956	life, universe, survey, proof, alien Moon, observe, meteor, sky, telescope, discovery, Association of Lunar and Planetary Observers, ALPO
Haas, Walter H.	The Association of Lunar and Planetary Observers	12	1956	Ptolemaeus and Alphonsus
Alter, Dinsmore	Ptolemaeus and Alphonsus	12	1956	Vanguard, satellite, artificial, equipment, instrument
Alter, Dinsmore	The 1957 Artificial Satellite	1	1957	
Press Release from Westmont College	Westmont College Observatory	1	1957	Westmont college observatory
Harvey, W. J.	Radio Astronomy: At the California Institute of Technology	2	1957	
Alter, Dinsmore	An Incan Solar Observatory	2	1957	radio, sky, observe, Doppler, Owens Valley Inca, Indian, stamp, Mexico, Italy, Galileo Bradley, aberration, atmosphere, parallax, circle, distance
Cleminshaw, C. H.	Aberration of Light	3	1957	
Alter, Dinsmore	An Equatorial Sundial	4	1957	
Alter, Dinsmore	A Novel Planetarium Show	4	1957	sundial, equatorial, Sun, time, equation GO, show, planetarium, design
Alter, Dinsmore	The Arend-Roland Comet	4	1957	comet, Arend-Roland, photo, telescope, observe
Cleminshaw, C. H.	Orbits of Comets and Earth Satellites	5	1957	geometry, satellite, comet, model, equation, Kepler, Halley, angle
Alter, Dinsmore	A Photographic Mosaic of the Milky Way	6	1957	photo, Milky Way, Planetarium, show, GO, map
Alter, Dinsmore	Parade of the Milky Way	6	1957	GO, shows, Milky Way, Planetarium
Roques, Paul E.	Photographic Observations of Comet Arend-Roland	7	1957	comet, Arend-Roland, photo, analysis, dust, cloud, observe
Joy, Alfred H.	Henry Norris Russell	8	1957	Russell, death, Hertzsprung-Russell, diagram, interests
Anonymous	Whittier Astronomical Society	8	1957	Whittier, society, meteor
Anonymous	Mira Costa Astronomy Club	8	1957	Mira Costa, club, observatory

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Cleminshaw, C. H.	Positions of the Planets An Exhibit of Chesley	9	1957	observe, sky, conjunction, Venus, Mars, Jupiter, Saturn, Mercury
Cleminshaw, C. H.	Bonestell's Paintings	10	1957	GO, paint, Bonestell
Alter, Dinsmore	The Satellite	11	1957	Soviet Union, Sputnik, space race, Moon, aristocracy, beat,
Alter, Dinsmore	Foreshadowing Space Travel	11	1957	rocket, Moon, travel, foreshadow, limit
Alter, Dinsmore	Man on the Moon	11	1957	Moon, travel, diameter, weigh, temperature, electric, power
Hagen, John P.	The Satellite Launching Vehicle - Placing the Satellite in Orbit	12	1957	launch vehicle, orbit, velocity, altitude, temperature, satellite, design
Cleminshaw, C. H.	Motions of Earth Satellites	1	1958	satellite, Newton, motion, equation, acceleration, Sputnik, geometry
Alter, Dinsmore	The Moment of Decision	2	1958	turning point, calendar, fire, printing press, mathematics
Hollister, C. Warren	Appearance and Reality in the History of Science	2	1958	Copernicus, Greece, Ptolemy, Almagest, Kepler, Newton, Einstein
Cleminshaw, C. H.	The Planets in 1958 Twenty-Three Years of the Griffith Observatory	3	1958	observe, sky, telescope, Mercury, Venus, Mars, Jupiter, Saturn
Alter, Dinsmore	News on Gravitation and Nuclear Goblins	4	1958	GO, retirement, Alter, Planetarium morphological, Newton, extreme, complete field coverage, gravity, equation, cluster, galaxy, density
Zwicky, F.	Dr. Alter Honored	5	1958	GO
-		5	1958	Palomar, observatory, Milky Way, Andromeda, galaxy, Eridanus, luminosity, temperature
Bowen, I. S.	The Universe from Palomar	6	1958	Los Angeles, society, Astronomical, amateur, observatory
Robinson, L. J.	The Los Angeles Astronomical Society	7	1958	observe, Nebula, telescope, sky, Draco
Copeland, Leland S.	A Short Trail to the Historic Nebula	7	1958	Weltshauung, world, view, Greece, Philolaus, Ptolemy, Copernicus, Kepler Sagittarius, Aratus, Orion, telescope, sky, observe
Hollister, C. Warren	The Idea of a Moving Earth	8	1958	gegenschein, glow, sky, observe, Brorson, amateur, study
Copeland, Leland S.	Sight-Seeing in Sagittarius	9	1958	
Richardson, Robert S.	The Earth's Ghostly Companion in Space	9	1958	
Bunton, George W. Hagar, Charles F.	The Paradox of the Falling Satellite	9	1958	satellite, parado, equation, velocity, friction, acceleration gravity, luminosity, mass, radius, Boyle, Charles, law, temperature, fusion, pressure, Hertzsprung-Russell diagram
Abell, George O. Richardson, Robert S.	The Structure and Evolution of Stars (Part 1 of 2)	10	1958	
Abell, George O. Richardson, Robert S.	Icarus - A Celestial VIP	10	1958	asteroid, orbit, Baade, Icarus Hertzsprung-Russell diagram, Hydrogen, luminosity, evolution, protostar, Hoyle, Swartzschild, dwarf, supernova
Abell, George O. Richardson, Robert S.	The Structure and Evolution of Stars (Part 2 of 2)	11	1958	Mars, closet, approach, atmosphere, life, canal, observe
Richardson, Robert S.	Mars Swings Near Again	11	1958	Bethlehem, birth, Christ, religion, Christmas, nova, Venus, Jupiter, Saturn
Richardson, Robert S.	The Star of Bethlehem - Fact or Myth?	12	1958	

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News Release from Caltech -	The Next Five Years at Palomar Exhibits of the Space Age A Manned Observatory in the Stratosphere	12 12 1	1958 1958 1959	Palomar, observe, universe, time, telescope GO balloon, telescope, unmanned, manned, observe, stratosphere, Schmidt satellite, Newton, gravity, centrifugal, motion probe, Moon, flight, plan, pass, trajectory, tracking
Mihalas, Dimitri M. News Release from JPL -	The Fable of Centrifugal Force Shooting the Moon	1 2	1959 1959	probe, Pioneer, failure, atmosphere
News Release from JPL & NASA Leaflet from Astronomical Society of Pacific Richardson, Robert S.	Pioneer III Rotation in the Solar System Venus	2 2 3	1959 1959 1959	rotation, Venus, Mars, period, Mercury, Jupiter, Carrington, Sun, Uranus, Neptune Venus, atmosphere, temperature, rotation, axis, cloud, surface Moon, research, surface, photo, GO, Alphonsus, spectrum, gas, discharge
Alter, Dinsmore -	The Alphonsus Story The Brightness of An Extended Surface As Seen in The Telescope	3	1959	telescope, equation, light gathering, magnify, bright satellite, Sputnik, instrument, dog, Laika, Explorer, temperature, micrometeor, atmosphere, Atlas, SCORE, Lunik
Wylie, Paul E.	Review of Contemporary Satellite Information The First Amateur Astronomical Observatory of Record in California	3 4	1959 1959	amateur, telescope, observatory, California, Madeira, Volcano Arizona, meteorite, crater, Barringer, Iron, Jakosky, survey, Volz Coma Berenices, Egypt, constellation, Cyrene
Killick, Victor W.	Planetarium: An Analysis of Opportunities and Obligations The First International Meeting of Planetarium Executives	4 6	1959 1959	Planetarium management, operation, education
Norton, O. Richard Copeland, Leland S. -	The Barringer Meteorite Crater That Wonderwork, Coma Berenices What Kind of a World is Jupiter? The Mystery Of the Motion of Encke's Comet	5 5 6 6	1959 1959 1959 1959	Planetarium, Meeting, Photo Jupiter, rotation, Great Red Spot, atmosphere Newton, gravity, Encke, comet, velocity, perihelion Solar system, scale, Jupiter, sun, size, light year Novae, Ophiuchi, explosion, spectrum, recurrent Sun, setting, Copernicus, atmosphere, prove, Jupiter, satellite
Cleminshaw, C. H.	The Scale of The Solar System	7	1959	Venus, Soviet Union, Kozrev, spectrum, life, photo, period, rotation
Roques, Paul E.	Recurrent Stellar Explosions Illusion and Reality in the Universe Some Recent Russian Observations of Venus	8 8 9	1959 1959 1959	Foucault, pendulum, Earth, rotation, GO, exhibit amateur, professional, Ptolemy, Stevenson
Richardson, Robert S. -	The Foucault Pendulum The Importance of Being an Amateur	9 10	1959 1959	

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Cleminshaw, C. H.	Sizes of Celestial Shadows	10	1959	celestial, shadow,
	Atmospheric Effects on Observations	11	1959	equation, Moon, eclipse, diameter, Earth atmosphere, telescope, observe, interference, scatter, light, twinkle
Mihalas, Dimitri Richardson, Robert S.	The Other Side of the Moon	11	1959	Moon, dark side, tide, libration in longitude, Mercury, diurnal, observation
Richardson, Robert S.	The Sky from Mars and the Moon	12	1959	Mars, Moon, sky, observe, Phobos, Deimos, Earth
News Release from Caltech	Astronomical News from Cal Tech	12	1959	Jupiter, temperature, moonquakes, Sun, magnetic field, supernova
	Optical Aberrations and the Early Development of the Telescope (Part 1 of 2)	1	1960	Galileo, aberration, satellite, Saturn, optical, spherical, long focus, Hevelius, chromatic, reflector, Newton
Norton, O. Richard	Aberrations and the Early Development of the Telescope (Part 2 of 2)	2	1960	Herschel, refractor, Uranus, Newton, achromatic, Dolland, Lens, Foucault
Norton, O. Richard	Astrology	2	1960	astrology, Babylon, Ptolemy, cult, pseudoscience, horoscope, zodiac
Cleminshaw, C. H.	Address at the Dedication of the Astronomers' Monument at the Griffith Observatory, Los Angeles, November 25, 1934	3	1960	Sun, bright, mass, luminosity, Schwarzschild, granulation, telescope, atmosphere
Richardson, Robert S.	Efforts to Detect Life Beyond the Earth	4	1960	GO, monument, dedication
Adams, W. S. Richardson, Robert S.	Twenty-Fifth Anniversary of the Griffith Observatory and Planetarium	4	1960	life, alien, planet, stellar, model, frequency, Ozma
Anonymous	The Founding of Griffith Observatory	5	1960	GO, anniversary, planetarium
Whitnall, Gordon	A Study of the Foucault Pendulum	5	1960	GO, Griffith
Wylie, Paul E.		5	1960	Foucault, pendulum, plane, motion, Earth, rotation, Coriolis effect
Richardson, Robert S.	Imaginary Journeys to the Moon	6	1960	Moon, fiction, Syrian, alien, Lucian, The True Story, Poe, Hans Pfaal, Verne, The Trip to the Moon, Wells, The First Men in the Moon
Richardson Robert S.	Basic Design for a Moon Building	6	1960	Moon, building, temperature, life, gravity
News Release from Caltech	Distance Indicators	6	1960	distance, pulsar, bright, Cepheid
	The Coming Conjunction of Jupiter and Saturn	7	1960	Saturn, Jupiter, observe, conjunction
Cleminshaw, C. H. Carothers, Jan Reaves, Gibson	Umbral Lunar Eclipses - 1960 thru 2000	7	1960	Moon, eclipse, visible Los Angeles, umbral astronomical unit, size, solar system, scale, geometry
Douglas, Bruce C. Richardson, Robert S.	The Scale of the Solar System	7	1960	Mars, Phobos, Deimos, satellite
	The Moons of Mars	8	1960	calendar, sidereal, anomalistic, tropical, ecliptic, precession,
Mihalas, Dimitri	The World Calendar: Calendar of Tomorrow	8	1960	GO, Planetarium, modernization, Zeiss,
Hall, Leon	Modernization of the Planetarium Control System	9	1960	control, console

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Douglas, Bruce C.	The Basis of Scientific Inquiry Frederick Charles Leonard:	9	1960	science, axiom, definition, parallel, postulate, Newton, Maxwell
Cleminshaw, C. H.	1896-1960	9	1960	Leonard, GO
Hagar, Charles F.				
Bunton, George W.	Planets Plod New Paths in Planetarium	10	1960	GO, Planetarium, projection array, workings
Richardson, Robert S.	Errors in "Round the Moon" By Jules Verne	10	1960	Verne, Round the Moon, fiction, equation, physics, telescope
Richardson, Robert S.	The Transit of Mercury of November 7, 1960: The Uses of Transits	11	1960	transit, Mercury, Sun, telescope, perihelion, equation, parallax
Killgrove, Raymond B.	Science and Mathematics	11	1960	math, science, count, relationship, variable, feedback
DuBridge, Lee A.	Adventures in Space	12	1960	atmosphere, space, gravity, weightless, satellite, psychology, observation
Richardson, Robert S.	December 23: Longest Day in the Year	12	1960	long, day, December 23, annual, Sun, daily, motion
-	Index of Articles in the Griffith Observer (Jan. 1955 - Dec. 1960)	12	1960	GO, index
Wylie, Paul E.	The Tides	1	1961	Moon, Earth, tide, water, gravity
Richardson, Robert S.	"Two Moons" in the Evening Sky	1	1961	Moon, sky, phase, reflected, light
Eastman, Jack	Astronomical Photography in Your Back Yard	2	1961	photography, observe, sky, telescope, amateur, method
Wylie, Paul E.	Astronomical Navigation	2	1961	navigation, Earth, Sun, Moon, line of position
Richardson, Robert S.	Things The Astronomer Does Not Do	3	1961	observe, telescope, routine, comet, hunting
Wylie, Paul E.	Why Don't Artificial Satellites Fall Down?	3	1961	satellite, gravity, orbit, equation, Newton
Latham, Philip	The Aphrodite Project	4	1961	fiction, rocket, Venus, satellite, mass, orbit
Richardson, Robert S.	Orbit of the Russian Venus Probe	4	1961	Soviet Union, probe, Venus, orbit
Roques, Paul E.	Lunar Occultations	4	1961	Moon, occultation, diameter, light
Richardson, Robert S.	Did You See Halley's Comet in 1910?	5	1961	Halley, comet, observe, return, history
Cleminshaw, C. H.	Edmund Halley	5	1961	Halley, life, England, Newton, comet
News Release from Caltech	Ice on The Moon?	5	1961	Moon, Ice, telescope, observe
Hagar, Charles F.	Through The Eyes of Zeiss	6	1961	Zeiss, Germany, planetarium, Bauersfeld
News Release from Caltech	The New Value of Earth-Sun Distance	7	1961	Venus, radar, bounce, rotation, astronomical unit, AU, Sun, Earth
Wylie, Paul E.	Lunar Motion (Part 1 of 2)	7	1961	Moon, center, equation, Kepler, Newton, motion, phase, calendar, orbit
Wylie, Paul E.	Lunar Motion (Part 2 of 2)	8	1961	Moon, motion, gravity, Kepler, Sun, Venus, equation, Newton, acceleration, regression

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Richardson, Robert S.	Flight Into Space - A Cosmic Accident?	8	1961	velocity, escape, Earth, equation, space, flight
Green, J.	Geology and Lunar Exploration	9	1961	geology, Earth, Moon, exploration, model, test, mission, site
Russell, John A. Richardson, Robert S.	The Fireball of January 16, 1961 Making An Astronomer: 30 Years Ago and Today	9 10	1961	meteor, GO, Los Angeles, sound, orbit, calculation letter, free, picture, study, University, course, radio
Cleminshaw, C. H.	The Two Brightest Asteroids	10	1961	asteroid, Vesta, Ceres, observe, sky, telescope, amateur
Norton, O. Richard Richardson, Robert S.	Celestial Cyclotrons Measuring Altitudes on the Moon	11 11	1961	radioactive, x-ray, proton, mesons, Yakawa, neutrino Moon, altitude, equation, height
Alter, Dinsmore	The Nature of the Lunar Rays	12	1961	Moon, feature, ray, crater, gas, material, form
Hefferan, Vi - Killick, Victor W. Richardson, Robert S.	Youth in the Satellite Age Our 25th Anniversary California's Early Astro- Geodetic Observatories	1 1 2	1962	Moon, watch, Satellite, High School, Explorer, engineer GO
Waggoner, James N. Richardson, Robert S. News Release from Caltech	What Would I Weigh on Pluto? Sending Instruments to the Moon "Could You Run The Eclipse Over Again, Please?"	2 3 4	1962	Pluto, gravity, equation, Newton, weigh Moon, instrument, spacecraft, Ranger, Agena, sensor, experiment, photography GO, eclipse, Sun, Moon, frequency, geocentric, parallax
Schaal, Marilyn W. Wylie, Paul E.	The Fireside in Outer Space The "End of the World" at the Griffith Observatory Astronomical News from Caltech	4 5 5	1962	astronaut, hospitable, isolation, cycle, life, spaceship pseudoscience, world, GO, Earth, astrology, India Moon, Sun, surface, atmosphere, Jupiter, radiation, belt, Supernovae
Cleminshaw, C. H.	The Mira Variables Terrestrial Latitude: And The Size and Shape of the Earth	5 6	1962	Mira, variable, diameter, spectrum latitude, degree, equator, zenith, survey, distance, geodetic
Chilton, Lewis Richardson, Robert S. Oriti, Ronald A.	Gravity and Space Travel The Amateur Astronomer's Telescope Some Recollections of Edison Pettit (1889-1962) New Meteorite Found	6 6 7 7	1962	gravity, space, travel, equation, orbit, Newton amateur, telescope, mirror, observe, sky Pettit, Wilson, Moon, eclipse, temperature, Mars meteorite, GO, Twenty- Nine Palms
Cleminshaw, C. H.	Jupiter's Satellites	8	1962	Jupiter, satellite, moons, perihelion, opposition
Wylie, Paul E. Richardson, Robert S. News Release from JPL	What is Ephemeris Time? Maybe You'll Like it On The Moon! Mariner Spacecraft	8 8 9	1962	time, sidereal, Sun, clock, rotation, Earth, revolution, ephemeris Moon, fiction, live, life Mariner, spacecraft, Venus, instrument, experiment, Atlas
Cleminshaw, C. H.	Two Great Siberian Meteorites	9	1962	Soviet Union, Siberia, meteorite, GO, shower, Tunguska

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Etheridge, Dale A.	Why Go Into Space?	9	1962	Space, Why, electronic, science, human, machine
Richardson, Robert S.	Lost on the Moon?... How to find yourself	10	1962	Moon, direction, location, substellar, point, position
	The Discovery of a New Variable Star	11	1962	variable, discovery, flare, drift, telescope, automatic, sequencing, system
Roques, Paul E.	Report on the 14th Annual Western Amateur Astronomers Convention	11	1962	amateur, convention, Western, Hawaii
Eastman, Jack				
Richardson, Robert S.	The Temperature of Venus	11	1962	Venus, temperature, Mercury, atmosphere autumn, observe, Pegasus, Hamal, Big Dipper, Andromeda
Cleminshaw, C. H.	The Stars of Autumn	11	1962	
	The Observatory that Griffith Built and Its Program of Research	12	1962	GO, Griffith, research, intent, scientific Polaris, North Star, north pole, Neptune, Uranus, rotation
Roques, Paul E.	Which Polaris Do You Mean?	12	1962	
Richardson, Robert S.	Lunar Night Temperatures	12	1962	Moon, temperature, infrared, cold
Cleminshaw, C. H.	A Preview of the 1963 Sky	1	1963	sky, observe, eclipse, Moon, phase, planet
Snow, Gaylene	So You think Astronomers Have Beards!!!	1	1963	astronomer, folk, lore, movie, role, beard Edison, talk, levels, needed, scientist, underestimate asteroid, path, sky, observe, Ceres, Vesta, Juno
Seaborg, Glenn T.	The Creation of a Scientist	2	1963	play, performance, Moon, Northwest passage
Cleminshaw, C. H.	The Paths of Three Asteroids	2	1963	
Richardson, Robert S.	Northwest Passage to the Moon	3	1963	
Richardson, Robert S.	Martian Weather on The Earth	3	1963	Mars, weather, Earth
Richardson, Robert S.	A Strange Object	4	1963	comet, Sun, spot, observe, sky
Richardson, Robert S.	Some Comments on the Results of the Mariner II Flight	4	1963	Mariner, Venus, rotation, spectrum, atmosphere supernovae, telescope, observe, light, curve, 4182, 1604, 1572, 1054
News Release from Caltech	Four Supernovae Found in One Week	4	1963	Copernicus, Ptolemaic, Brahe, Kepler, Galileo
Cleminshaw, C. H.	A Century of Astronomy (1543-1642)	5	1963	
Richardson, Robert S.	Orbit of Mars-1	5	1963	Mars, Soviet Union, probe
Richardson, Robert S.	The "Stolons" of Mars	5	1963	canal, Mars, pseudo, alien, stolon life, Earth, Nature, amino acid, Venus, Mars
Horowitz, Norman	Is There Life On Other Planets?	6	1963	longitude, Greece, Eratosthenes, Strabo, earth, flat, Ptolemy, Moon, Mars
Wylie, Paul E.	The Quest of The Longitude	6	1963	
Cleminshaw, C. H.	Eclipses of the Sun and Moon	7	1963	Moon, Sun, eclipse, total, frequency, partial Sun, Moon, eclipse, GO, observe, Los Angeles
Richardson, Robert S.	The Eclipse of July 20, 1963	7	1963	

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Cleminshaw, C. H.	When Will the Eclipse Begin? It's Time to Clean Your	7	1963	Sun, moon, eclipse, observe, time, GO
Roques, Paul E.	Telescope Lens	7	1963	telescope maintenance
News Release from Caltech	Water Vapor on Mars	7	1963	Mars, water, atmosphere galaxy, cluster, Hubble, spiral, elliptic, irregular, Local Group, mass, light
Abell, G. O. Richardson, Robert S.	Clusters of Galaxies	8	1963	Nicholson, Wilson, observatory, Jupiter, satellite
Richardson, Robert S.	Seth Barnes Nicholson The Peregrinations of a Periscope	9	1963	periscope, GO, Blenny, Charr, Ronquil, exhibit, submarine
Oriti, Ronald A. Richardson, Robert S.	The Day of the Eclipse	10	1963	eclipse, observe, Sun, Moon, GO
Richardson, Robert S.	Communication Difficulties	10	1963	eclipse, moon, communication, sun, observe
Richardson, Robert S.	Lightweight Reading for Mars	10	1963	Mars, book, ship, Playboy
News release from Caltech	Largest Kind of Explosion Ever Recorded in Nature	11	1963	nucleus, galaxy, explosion, M82
Richardson, Robert S.	If A Comet Collided with the Earth: "What Would Happen if a comet collided with the earth?"	11	1963	comet, earth, Mars, collision, Halley
Etheridge, Dale A.	Solar Eclipse of July 20, 1963	11	1963	Sun, Moon, eclipse, observe, photo
Cragg, Thomas A.	The First Sunspot of the New			
-	Cycle and What it Means	12	1963	Sun, cycle, spot, observe
-	Comets on the Sun	12	1963	observe, comet, Halley, Sun
-	Blame it On Sunspots	12	1963	sun, spot, cycle, discovery
-	Sundials and Solar Geometry	1	1964	sun, dial, geometry, equatorial, create direction, day, stick, shadow, azimuth, diagram, Eskimo
Owendoff, Robert S.	Daytime Direction-Finding	1	1964	Mars, Pasteur, bacteria, microbe, possible life
Marshall, Max S. Richardson, Robert S.	Martian Microbes Outlook Dimmer for Life on Mars	2	1964	Life, Mars, chance, alien
Richardson, Robert S.	How NOT to have a Total Solar Eclipse	2	1964	Sun, Moon, eclipse, total, equation observe, conjunction, Earth, sky, Jupiter
Cleminshaw, C. H.	Triple Conjunctions	2	1964	Saturn, Kepler
Richardson, Robert S.	Venusians, Venerians or Venustians	2	1964	Venus, life, name, Latin
Richardson, Robert S.	Encke's Comet to Call This Summer	3	1964	Comet, Encke, observe, probe, idea, orbit meteorite, recognize, identify, aerolite, siderites, siderolite, checklist
Oriti, Ronald A.	How to Recognize a Meteorite	3	1964	planetarium, GO, Zeiss, new, instrument, projector
Hagar, Charles F.	New Skies for Los Angeles	4	1964	
Cleminshaw, C. H.	Galileo's Sky	4	1964	Galileo, Jupiter, Saturn, Polaris, Mars, sky
Wylie, Paul E. Richardson, Robert S.	Why Do People Study Astronomy?	5	1964	Human, curiosity, Newton, interest, why Mars, steamship, canal, alien, life, intelligent
	The Martian Network	5	1964	

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Richardson, Robert S.	The Five Books You Would Take To Mars	5	1964	Mars, author, book, Shakespeare, Bible, Tolstoy, Carroll
News release from Caltech	The Most Way-Out Object Ever Measured in the Universe	6	1964	quasar, quasi, wavelength, redshift, galaxy, radio
Richardson, Robert S.	Another First for Mercury (?)	6	1964	Mercury, density, gravity, mass, size, velocity
Snow, Gaylene	Tektites are for the Birds!!	6	1964	tektite, bird, Kirkham, meteorite
News Release from Caltech	New Temperature Measures On Jupiter and Its Satellites	7	1964	Jupiter, Ganymede, Callisto, Palomar, temperature, atmosphere
	Four Simple Seasonal Star Maps	7	1964	Four Simple Seasonal Star Maps
Cleminshaw, C. H.	Behind the Scenes at the Griffith Observatory	7	1964	star, map, constellation, observe, sky
Marhenke, Max W.	Prepared Statement on the Space Program	7	1964	GO
Schwarzschild, M.	A Total Solar Eclipse on Mars	8	1964	Moon, program, flight, reason, manpower, new age
Richardson, Robert S.	Ranger's Pictures of the Moon	8	1964	Mars, Sun, Deimos, Phobos, eclipse,
-	John Goodricke	9	1964	Moon, Ranger, Atlas, acceleration, gravity
Cleminshaw, C. H.	Mariner Mars Spacecraft	10	1964	Goodricke, Algol, binary, Delta, Cephei, variable
News Release from JPL	Star or Planet or "Stellar Companion"	10	1964	Mariner, spacecraft, Mars, probe, atmosphere
Richardson, Robert S.	Amateur's Telescope - Build it or Buy it?	10	1964	star, planet, Russell
Balogh, David A.	Gravity Gradient Attitude Control	10	1964	amateur, telescope, refractor
Epstein, Lewis	Progress for Safer Manned			
Fairbanks, John	Spaceflights	11	1964	satellite, attitude, spin, gravity, gradient
Waggoner, James N.	The Length of a Planet's Day	11	1964	life, atmosphere, gas, pressure, weight, radiation, temperature, psychological
Richardson, Robert S.	Astronomy in the Modern High School	11	1964	rotation, day, length, Jupiter, Cassini, ephemeris
Etheridge, Dale A.	Mission to Mars	11	1964	education, high school, astronomy, textbook
News Release from JPL	Make Your Own Telescope	12	1964	Mariner, Mars, temperature, television, occultation, radiation, dust
	The Fireball of September 3, 1964	12	1964	telescope, amateur, create, make, mirror, refraction, reflection
Oriti, Ronald A.	Comet News from Palomar	1	1965	fireball, meteor, Los Angeles, GO, bolide, Orosi, California
-	Jupiter's Magnetic Field	1	1965	comet, Carbon, contain, rare
News Release from JPL	Finding North from Polaris	1	1965	Jupiter, magnetic, field, observe
Richardson, Robert S.	Why Did Isaac Newton Miss the Dark Solar Lines	2	1965	Polaris, north, latitude, compass
Cleminshaw, C. H.	The Five Brightest Planets	2	1965	Newton, spectrum, dark line, Wollaston, Kirchhoff
-	Martian Target Areas	3	1965	Mercury, Venus, Mars,
	Your Weights on the Moon and Planets	4	1965	Mars, Mariner
Cleminshaw, C. H.		5	1965	GO, weight, Moon, Mars, Jupiter, Earth, exhibit

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News release from Caltech	New Radio Antenna Telescopic Resolution of Fine Detail	5	1965	NSF, radio, telescope
Cragg, Thomas A.	The Alphonsine Area Faint Ring Around Spiral Galaxy M82	5	1965	telescope, resolution, detail, equation NASA, Ranger, Moon, observe, Ptolemaeus, crater
Alter, Dinsmore News Release from Caltech	The Telescope, its Principle and Use	6	1965	M82, telescope, photograph, spiral, galaxy, ring
Eastman, F. Jack	White Dwarf Stars	6	1965	telescope, focus, magnitude, length, refract, reflect, photometer
News release from Caltech	Quasars as Pulsating Stars	7	1965	white dwarf, observatory, Hyades
News Release from Caltech	The Tesla Coil	7	1965	Quasar, nucleus, pulsar, energy
Hall, Leon Cameron, Winifred Sawtell	An Appeal for Observations of the Moon	8	1965	Tesla, coil, GO, works, diagram, lightning, exhibit
-	Initial Scientific Interpretation of Mariner IV Photography	8	1965	observe, moon, NASA, amateur
News Release from Caltech	The Surface Temperature of Venus	9	1965	Mars, crater, Mariner, picture
News Release from Smithsonian	Comet Break-ups Tied to Structural Defects	9	1965	Venus, temperature, surface, observe
Oriti, Ronald A.	Earthquakes Precision Globes of the Planet Mars	10	1965	comet, break, up, defect, ice, snow
Roth, James	Mars	10	1965	earthquake, tsunami, intensity, volcano, tectonic, wave, plutonic
Oriti, Ronald A.	Dry Lakes and Meteorites	11	1965	globe, Mars, map
Oriti, Ronald A.	The Lucerne Valley Aerolites	11	1965	lake, dry, meteorite, search
Cragg, Thomas A.	Seeing	11	1965	Lucerne, meteorite,
Cleminshaw, C. H.	The Sun's Daily Path Across the Sky	12	1965	aerolite, Lucerne
Oriti, Ronald A.	How Far Can You See?	12	1965	seeing, telescope, atmosphere, Wilson
Oriti, Ronald A.	The Largest Meteoritic Diamond	12	1965	zodiac, equator, zenith, sun
Royer, Ronald E.	Observing Comet Ikeya-Seki during the Day	12	1965	magnitude, brightness, distance, observe
Hall, Leon	The Seismograph and its Records	1	1966	Arizona, meteorite, crater, Diablo, diamond
Cleminshaw, C. H.	Observing Jupiter's Four Brightest Satellites	1	1966	comet, observe, telescope, Ikeya-Seki
Cleminshaw, C. H.	The Thirty Other Moons	2	1966	seismograph, earthquake, GO, motion, copper coil, exhibit
Cleminshaw, C. H.	The Three Outer Planets	3	1966	observe, sky, telescope, Jupiter, satellite, Io, Europa, Ganymede, Callisto
Oriti, Ronald A.	Moonlight	3	1966	moon, satellite, Mars, Jupiter, Saturn, Uranus, Neptune
Hall, Leon	Russian Luna Nine	4	1966	Uranus, Herschel, orbit, Neptune, Lowell, Pluto
Cleminshaw, C. H.	Rendezvous in Space	4	1966	Moon, light, reflection, phase, distance
				Luna, Soviet Union, probe, Moon, surface
				rendezvous, equation, ellipse, Kepler, velocity

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Oriti, Ronald A.	Brightness, Intensity, and the Inverse Square Law	4	1966	bright, intensity, Herschel, area, unit, angle
Cleminshaw, C. H.	The Moon's Path in the Sky	5	1966	Moon, observe, sky, ecliptic, equator, path
Oriti, Ronald A.	Two New Meteorites on Display	5	1966	GO, meteorite, exhibit
Cleminshaw, C. H.	Auxiliary Apparatus for the Planetarium	6	1966	GO, planetarium, auxiliary, apparatus
News Release from Caltech	New Antenna to Probe Outer Limits of Deep Space	6	1966	Antenna, Goldstone, track, radio, communication Hubble, telescope, galaxy, expand, Constant, Big Bang, redshift, cosmology
Roques, Paul E.	And In The Beginning... Surveyor I	7	1966	Moon, Surveyor
-		8	1966	
News Release from Caltech	RR Lyrae Stars	8	1966	RR Lyrae, variable, distance, pulse
Oriti, Ronald A.	Some Recent Information on the Diameter of Pluto	8	1966	Pluto, diameter, mass, Kuiper
Dunham, David W.	The Observation of Lunar Occultations and Grazing	9	1966	Moon, sky, observe, occultation, graze
-	Occultations	9	1966	
	The Second International Meeting of Planetarium Executives in Bochum, Germany	9	1966	GO, planetarium
Oriti, Ronald A.	Flying Saucers	9	1966	UFO, alien, observe, pseudoscience, saucer, explanation
Cleminshaw, C. H.	Saturn's Rings Edgewise	10	1966	Saturn, ring, observe, edge, Cassini
News Release from Caltech	Temperature of a Comet	10	1966	comet, temperature, Ikeya-Seki
-	Lunar Orbiter Has its Own Dark Room	10	1966	Moon, orbit, photo
News Release from Smithsonian	Smithsonian Scientists Report Continents on Mars	10	1966	Mars, continent, Sagan, Pollack comet, orbit, parabola, eccentricity, photo, nucleus, composition
Oriti, Ronald A.	Comets	11	1966	
Roques, Paul E.	How to Live With a Telescope	11	1966	telescope, magnification
News Release from Smithsonian	Lunar Colonists May Converse	11	1966	
News Release from JPL	Via Radio Ground Waves	11	1966	Moon, colony, radio, waves
	X-15 Experiment to Help JPL Scientists in Solar Simulation	11	1966	X-15, sun, measure, simulation
Oriti, Ronald A.	Meteors and Meteor Showers	12	1966	meteor, shower, igneous, luminous, water, atmosphere, comet, collision
Cleminshaw, C. H.	The Date of the Birth of Christ	12	1966	Christ, Bethlehem, Christmas, Augustus, calendar
Cleminshaw, C. H.	The Rotation of Venus	12	1966	Venus, rotation, counterclockwise, period
Cleminshaw, C. H.	The Five Brightest Planets in			Mercury, Mars, Venus, Jupiter, Saturn, observe
Cleminshaw, C. H.	1967	1	1967	
Dunham, David W.	Lunar Occultations and Grazing			
Dunham, David W.	Occultation in Early 1967	1	1967	Moon, occultation, observe

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Cleminshaw, C. H. News Release Palomar	Double Stars and Star Clusters in the Winter Sky New Photographic Emulsion	2	1967	double star, ascension, Gemini, Castor, Dog, Sirius, cluster, Hyades photography, Palomar, emulsion, new
News Release JPL	Interplanetary Billiards System May Propel Spacecraft of 1970's Christmas days and Easter	2	1967	gravity assist, spacecraft, Jupiter Christmas, Easter, calendar, leap year,
Cleminshaw, C. H.	dates	3	1967	Gregorian
Russell, John A. -	Education for the Frontier The Day of Two Noons Size and Distribution of the	3	1967	education, frontier, space, Ptolemy, contact
Oriti, Robert A.	Lunar Craters	4	1967	railroad, time, standard, clocks, uniform Moon, crater, size, distribution
Oriti, Robert A. News Release from Caltech	The Origin of Lunar Craters New Light on Quasars	5	1967	Moon, crater, origin, meteor, volcano, tectonic quasar, light, diameter, nucleus
Oriti, Robert A. -	Tektites Surveyor Spacecraft	6	1967	tektite, glass, silica, liquid, splash, meteor, moon Surveyor, Moon
Rhodes, Lynwood Mark	The Man who Reached For Space	7	1967	Goddard, Verne, rocket, New Mexico, military
Dunham, David W.	Lunar Occultations and Grazing Occultations during the Summer of 1967	7	1967	Moon, occultation, grazing, observe, sky
Oriti, Ronald A. Green, Jack News Release from Caltech	Alternate Interpretations of the Orientale Basin The Need For More Large Telescopes	8	1967	Orientale Basin, Orbiter, asteroid, Moon, volcano, impact telescope, Southern Hemisphere, telescope
News Release from Caltech	New Radio Telescope	9	1967	radio telescope, Owens Valley constellation, star, navigate, Apollo, Rigel, Polaris
Cleminshaw, C. H.	Navigational Stars	9	1967	
Johnson, Arthur W.	Lunar Occultations and Grazing Occultations in late 1967	10	1967	Moon, occultation, grazing, observe, sky
Cleminshaw, C. H. Oriti, Ronald A.	Mira, The Wonderful Star Densities of the planets	10	1967	Mira, Latin, Brahe, observe
Oriti, Ronald A.	Anomalous Sounds	11	1967	Planet, density hear, Aristotle, sonic, anomalous, ethereal, meteor, fireball
Cleminshaw, C. H. News release from Palomar	Helium, The Sun Gas Sunspot Activity on the Stars	11	1967	Helium, Sun, discovery, Newton, Lockyer, spectrum star, sun, spot, Helium, convection
Roques, Paul E.	The Extinction Photometer in the Hands of the Amateur	11	1967	photometer, research, amateur
Cleminshaw, C. H.	Planet Positions	1	1968	Mercury, Venus, Mars, Jupiter, Saturn, observe, sky
Johnson, Arthur W.	Lunar Occultations and Grazing Occultations in Early 1968	1	1968	Moon, occultation, observe, sky, graze

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Oriti, Ronald A.	Light and Life	2	1968	light, life, Sun, spectrum, radiation, ultraviolet, infrared, gamma
Cleminshaw, C. H.	The First Ten Years of the Space Age	3	1968	United States, Soviet Union, Sputnik, Pioneer, Echo, NASA, Mercury
Cleminshaw, C. H.	Eclipses	4	1968	eclipse, Moon, Sun, shadow, total
Oriti, Ronald A.	Music in the Planetarium	4	1968	GO, Music
Oriti, Ronald A.	Why I am Going to the Moon	4	1968	Moon, Krutch, Soviet Union, United States
News Release from Palomar	New Solar Observatory	4	1968	Sun, observe, telescope, solar
Cleminshaw, C. H.	George Ellery Hale (1868- 1938)	5	1968	Hale, Yerkes, Observatory, Wilson, telescope
Oriti, Ronald A.	Icarus comes Near	5	1968	asteroid, Ceres, Icarus,
Oriti, Ronald A.	Times of Meteorite Fall	6	1968	meteorite, asteroid, number, comet
News Release from JPL	Antarctic Soil Studies	6	1968	Antarctic, soil, microorganism
Oriti, Ronald A.	Tektites - Glass from the Moon?	6	1968	Moon, tektite, glass, meteor, impact
News Release from JPL	Planetary Landing Craft	6	1968	Mars, land, craft, probe, test
Mihalas, Larry	The Particle and Wave Duality of Light	6	1968	light, particle, wave, Einstein
Oriti, Ronald A.	The Northern Lights	7	1968	Northern Lights, aurora, radiation, sun, magnetic, pole, wind
News Release from Caltech	Pulsars	7	1968	Pulsar, radio, observatory
-	The Value of the Space Program	7	1968	Humphrey, award, United States, moon
News Release from JPL	Mariner '69 Fact Sheet	7	1968	Mars, Mariner, probe
Lange, Erwin F.	Oregon's Moon Country	8	1968	Oregon, moon, Surveyor, Crater Lake, volcano
News Release from Caltech	Dr. Zwicky Retires	8	1968	Zwicky, retire
Cleminshaw, C. H.	Transits of Venus	9	1968	Venus, moon, Mercury, transit, Horrocks, observe
News Release from Palomar	Prediction of Solar Flares	9	1968	solar, flare, sun, prediction
News Release from Palomar	Large Solar Telescope	9	1968	Sun, telescope, revive
Johnson, Arthur W.	Occultations in Late 1968	9	1968	sky, observe, occultation, Moon
News Release from Palomar	Distance of a Quasar	9	1968	Milky Way, Mathews, Palomar, quasar, distance
Cleminshaw, C. H.	The Riverside Sundial	10	1968	sundial, sun, orbit, Earth, Riverside, Kepler, ecliptic
Hagar, Charles F.	The Concept of the Celestial Sphere	11	1968	celestial, sphere, Egypt, Greece, Copernicus, Galileo, Herschel, constellation
Eastman, F. Jack	Southwestern Astronomical Conference	11	1968	New Mexico, conference, university, observe, telescope
Oriti, Ronald A.	Lucerne Dry Lake Revisited	12	1968	Hartman, Lucerne Dry Lake, California, meteorite, Arizona

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Oriti, Ronald A.	Sidereal Time	12	1968	sidereal, solar, day, time, equinox
Cleminshaw, C. H.	A Triple Conjunction of Jupiter and Uranus	12	1968	Jupiter, Uranus, Mars, conjunction, Virgo
News release from JPL	JPL Radar Indicates Icarus tiny, Very Rough	12	1968	asteroid, Icarus, radar, observe
-	Occultations in Early 1969	1	1969	Moon, occultation, observe
Oriti, Ronald A.	The Back of the Moon	1	1969	Moon, alien, dark, crater, Clavius, Grimaldi Hipparchus, Copernicus, Galileo, Kepler, Newton, Herschel
Cleminshaw, C. H.	Six Great Astronomers	2	1969	Apollo, Moon, Earth
Oriti, Ronald A.	Apollo 8	3	1969	Mars, Viking, Mariner, spacecraft, equipment
News Release from JPL	Mariner Mars '69	4	1969	Bruno, life, alien, star, Laplace, Kant, spectral, star, Mercury, Mars
Oriti, Ronald A.	Life On Other Worlds	5	1969	Southern Cross, observe, Big Dipper, constellation
Bunton, George W.	The Southern Cross	6	1969	Pulsar, irregular
News release JPL	Irregular Pulsar	6	1969	New Telescope at Palomar
News Release from Palomar		6	1969	telescope, Wilson, Palomar, Caltech
News Release from JPL	Lunar Mass Concentrations	6	1969	Moon, NASA, mass, Lunar, orbiter planetarium, architecture, Dow, Calgary, Centennial, Manitoba museum, Strasenburgh, MacMillan, McLaughlin
Hagar, Charles F.	Six Recent Planetariums of Architectural Interest	7	1969	occultation, observe,
Johnson, Arthur	Occultations - Summer 1969	7	1969	Moon
	The "Observing" Climate at the Griffith Observatory (Seeing Conditions at the			
Balogh, David A.	Griffith Observatory 1953-1966)	8	1969	GO
Oriti, Ronald A.	The Canals of Mars	8	1969	Mars, Lowell, canal, Mariner, Verne, fiction
Oriti, Ronald A.	Dr. Cleminshaw Retires	9	1969	GO, Cleminshaw
Etheridge, Dale A.	The Dawn of Astronomy	10	1969	Gizeh, Egypt, Cheops, Stonehenge, Hawkins, Callanish
Johnson, Arthur	Occultations in Late 1969	10	1969	Moon, occultation, observe
Etheridge, Dale A.	Meteor Observing	11	1969	meteor, observe, count, shower, sporadic, photography, Perseid
	"Travel to the Moon by the Year 2050: Princeton"			
	Astronomer Predicts Space Travel Surprisingly Soon			
Science Service Mail	Year 2050: Princeton	11	1969	predict, future, 1930, Moon, space, travel
Roques, Paul E.	The Death of a Giant	12	1969	GO, moon, model
Cragg, Thomas A.	The Hertzsprung-Russell Diagram	12	1969	Hertzsprung, Russell, diagram, class, variable, giant, dwarf
Kaufmann, William J.	Quasars - The Most Remarkable Objects Ever Discovered	1	1970	Jansky, quasar, Hydrogen, redshift, gravitational, cosmology, Doppler, Hubble
Johnson, Arthur	Occultations in Early 1970	1	1970	Moon, occultation, observe

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-	An 1874 Textbook of Astronomy	1	1970	textbook, definition, terms, observe, example
Oriti, Ronald A.	Extraordinary Naked-Eye Observations of the Planets	1	1970	Herschel, Uranus, Lemonnier, Galileo, Brahe, observe, naked eye, Venus, Jupiter
	Two Prehistoric Drawings of Possible Astronomical Significance	2	1970	Navajo, Arizona, Indian, draw, Crab, supernova, cave
Miller, William C.				eclipse, sun, Moon, total, North America, observe
News Release from Smithsonian	Eclipse of the sun for North America in March 1970	2	1970	Wilson, trail, horse
Roques, Paul E.	The Good Old Days?	2	1970	
Richardson, Robert S.	"Acquiring Canopus"	3	1970	Canopus, observe, atmosphere, politic
	Some Comments About the New Director	3	1970	
Roques, Paul E.	Better Eyes With Which to See	3	1970	spectrum, spectrometer, photon
Kaufmann, William J.	Pulsars (Part 1 of 2)	4	1970	Hewish, pulsar, radio, Crab, electron
Richardson, Robert S.	The Age of Aquarius - When?	4	1970	astrology, Aquarius, pseudoscience, zodiac, Hipparchus
	The Evolving Planetarium: Recent Advances in			
Etheridge, Dale	Planetarium Technology	4	1970	planetarium association of Canada
Kaufmann, William J.	Pulsars (Part 2 of 2)	5	1970	Pulsars, alien, LGM, Little Green Men, Hewish, evolution, stellar, neutron, model
Livingston, Wm. C.	The Moscow Planetarium	5	1970	Moscow, Soviet Union, planetarium, Portsevsky
Oriti, Ronald A.				
Cragg, Thomas A.	The Eclipse of March 7, 1970	5	1970	eclipse, sun, Moon, total, observe
	The Wayward Heavens in Literature	6	1970	moon, Coleridge, The Rime of the Ancient Mariner, Venus, conjunction
Berman, Louis				
Kaufmann, William J.	Neptune: A Challenge for the Accomplished Amateur	6	1970	Herschel, Uranus, Leverrier, opposition, Triton, observe
Smith, Ronald	Planetary Photography	6	1970	planet, photography, exposure, instruction
Kaufmann, William J.	Current Research on Pulsars	6	1970	
	Surveying the Sky with Binoculars	6	1970	Pulsars, research, starquake
Mitchell, Gordon				
Nixon, Richard M.	The Future of the Space Program	7	1970	observe, sky, binocular, Jupiter, Venus NASA, Moon, Apollo, Experimental Space Station
Corwin, Harold G.	The Gregarious Galaxies	7	1970	galaxy, gregarious, cluster, distance, Hubble, constant
Johnson, Arthur W.				
Friedman, Stanton T.	Occultations in Late 1970	7	1970	Moon, observe, occultation, sky
	The Case for the Reality of Flying Saucers	8	1970	
Oriti, Ronald A.	The Argument Against the Existence of Flying Saucers	8	1970	UFO, alien, saucer, pseudo, myth, observe
	Rebuttal to Oriti's Argument			UFO, alien, saucer, pseudoscience, space travel, observe
Friedman, Stanton T.	Against the Existence of Flying Saucers	8	1970	UFO, alien, saucer, pseudo, observe, report

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Oriti, Ronald A. Kaufmann, Barbara H.	Rebuttal to Friedman's Argument in Favor of Flying Saucers	8	1970	UFO, alien, saucer, pseudoscience, Jefferson, observe
Kaufmann, William J.	Psychological and Philosophical Perspectives on Flying Saucers	8	1970	UFO, alien, saucer, pseudoscience, observe, philosophy, psychology
	The Distance To The Hyades and the Calibration of the Hertzsprung-Russell Diagram	9	1970	Hyades, Taurus, Hertzsprung, Russell, cluster, mass, luminosity, distance, Wallerstein, Hodge
DeVorkin, David				
Gingerich, Owen	The Central Bureau for Astronomical Telegrams Observational Notes on Nebulae	9	1970	report, telegram, Astronomical Telegrams, supernovae, Schumacher, Harvard
Corwin, Harold G.				
Cleminshaw, C. H.	The Cost and Value of the Space Program	9	1970	Apollo, NASA, alcohol, fund, Congress, radio, biology
Kaufmann, William J.	WZ Sagittae: An Extraordinary Ultra-Short Period Binary	10	1970	binary, period, short, Sagittae, Sge, relativity
Hetherington, Norris S.	The Shapley-Curtis Debate Observational Notes on Clusters	10	1970	Shapley, Curtis, debate, universe, size, galaxy, Cepheid
Corwin, Harold G.				
Richardson, Robert S.	The Stars and Serendipity	10	1970	Cygnus, Northern Cross, observe, cluster, galaxy
News Release from Smithsonian	Three More Eclipses for North America	10	1970	Newton, gravity, Neptune, Mars, Greenland, Walpole
Thorne, Kip S.	The Death of A Star "The Red Star in the Face Called the Dog"	11	1970	eclipse, North America, Sun, Moon, observe, total star, death, supernovae, black hole, neutron star, white dwarf, pulsar, neutrino, relativity
Latham, Philip				
Kaufmann, William J.	The Exploding Galaxy NGC 1275	11	1970	Dog, Sirius, Ptolemy, Strindberg
Kaufmann, William J.	The Detection of X-Ray Emission From a Quasar!	11	1970	galaxy, radio, telescope, Perseus, Lynds
Gaustad, John E.	The Composition of the Interstellar Dust	12	1970	quasar, x-ray, Centaurus, detection Milky Way, galaxy, molecule, Hydrogen, interstellar, material, dust
Irwin, John B.	The 1970 International Astronomical Meetings in England	12	1970	England, meeting, Copernicus, Oort, discussion
Corwin, Harold G.	Observational Notes on the Pegasus I Cloud	12	1970	Pegasus, cloud, galaxy, cluster, observe
DeVorkin, David H.	Double Star Astronomy and the Search for Unseen Planetary Companions of Stars	1	1971	planet, double, binary, Jupiter, Kumar, Riccioli, Mizar, observe, astrometric, detection, proper
Kaufmann, William J.	The Curvature of Space and the Ohio Survey	1	1971	geometry, Euclidean, Hubble, constant, open, closed, flat, Ohio University, survey
Johnson, Arthur	Occultations in Early 1971	1	1971	moon, occultation, Sigma, Sagittarii, Tauri

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Roques, Paul E.				interplanetary, dust, material, ecliptic,
Whitt, Patricia K.	Dust Between the Planets	2	1971	gegenschein, zodiac
Etheridge, Dale A.	A Decade of Lunar Conquest	2	1971	Moon, satellite, mission, Apollo, Luna,
Kaufmann, William J.	Recent Infrared Observations of Stars	2	1971	Ranger, United States
Slater, John M.	Automated Celestial Navigation	2	1971	Herschel, infrared, Angstroms, radiation,
Kaufmann, William J.	624 Hektor	3	1971	Chi Cygni, Betelgeuse
	Airborne Observations of the			navigation, automatic, star, track, Gyros
Keller, Charles F.	1970 Total Solar Eclipse Observational Notes on the	3	1971	Herschel, Kepler, three-body problem, asteroid, Hektor, Trojan
Corwin, Harold G.	Local Group	3	1971	observe, Sun, moon, eclipse, total, airplane
Kratage, M. L.				Milky Way, galaxy, Local Group, cluster
Wood, D. B.	Space Astronomy	4	1971	space, telescope, United States, Soviet Union, observe
Harrison, E. R.	The Grin Cosmologies	4	1971	Cosmology, Carroll, Alice in Wonderland,
Richardson, Robert S.	"What is the Latest Quotation on the Universe?"	4	1971	Cheshire Cat, galaxy
Arana, Louis R.	The Leonid Meteor Shower	4	1971	GO, cluster, galaxy, distance, Hubble, constant, cosmology
Pietraszko, Philip M.	Constellations - Myth or Reality?	5	1971	Leonid, meteor, shower, observe, Weber legend, myth, constellation, story, religion, oral
Kaufmann, William J.	Maffei 1: New Massive Member of the Local Group	5	1971	Local group, Maffei, reddening, observe, mass
Kaufmann, William J.	The Nature of the Neutron Star Observational Notes on the	5	1971	stellar, model, neutron, state, nuclei, pulsar, superfluity, superconductivity
Corwin, Harold G.	NGC 488 Group	5	1971	cluster, group, galaxy, observe, mass
Etheridge, Dale A.	After Apollo: Man's Role in Space (Part 1 of 4)	6	1971	Apollo, Moon, man, space, NASA, Skylab
Kaufmann, William J.	Recent Observations of the Crab Pulsar NP 0532	6	1971	Taurus, Crab Nebula, pulsar, supernovae
Cleminshaw, C. H.	Another Look at Kepler's Laws Observational Notes on the	6	1971	Kepler, law, Aristotle, ellipse, sun, planetary, motion
Corwin, Harold G.	M101 Group	6	1971	M101, galaxy, cluster, Local Group
Roques, Paul E.	The Moon Rock was Great?	7	1971	Moon, rock, NASA, GO
Kaufmann, William J.	Recent Observations of Galaxies	7	1971	galaxy, Hubble, Wilson, infrared, ultraviolet, mass, quasar
Etheridge, Dale A.	After Apollo: Five Months in Space (Part 2 of 4)	7	1971	Apollo, Moon, Skylab, NASA, station
Etheridge, Dale A.	Getting Away from it All: The Mission of Apollo 15	7	1971	Apollo, Moon, Irwin, land, NASA, Apennine
Menke, David H.	A Brief Discussion of Red			red giant, white dwarf, Hertzsprung,
Bornstein, Joann Hetherington, Norriss S.	Giants and White Dwarfs Lowell's Theory of Life on Mars	7	1971	Russell, Helium, Hydrogen
Wallis, Brad D.	1971: The Era of Kepler	8	1971	Lowell, Mars, life, alien, atmosphere, canal
Roques, Paul E.	When Mars is Near	8	1971	Kepler, planetary, motion, Brahe, Newton
Kaufmann, William J.	Experimental Tests of the General Theory of Relativity	8	1971	Mars, polar, cap, rotation, moon, Phobos Einstein, relativity, Mercury, redshift, light, proof, microwave
Etheridge, Dale A.	After Apollo: Living in Space (Part 3 of 4)	8	1971	Apollo, moon, space, man, living, Saturn V, Skylab

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Etheridge, Dale A.	Astronaut Helmets As Radiation Detectors	9	1971	radiation, sun, helmet, detect
Kaufmann, William J.	The Discovery of A Collapsar After Apollo: Science in Space (Part 4 of 4)	9	1971	white dwarf, neutron, star, pulsar, black hole, collapsar
Etheridge, Dale A.	"Space Navigation"	9	1971	Skylab, sun, observe, biomedical, spectra, technology
Woddell, Ray K.	X-Ray Observations from Uhuru	9	1971	navigation, sextant, Earth, space
Kaufmann, William J.				X-ray, satellite, NASA, Uhuru, Cyg X-1, pulsar
Dickinson, Terence	Mars - A New World to Explore	10	1971	Mars, Mariner, exploration, impact, soft landing, Viking, Sagan, dust, atmosphere
Kaufmann, William J.	Recent Research on Quasars	10	1971	Quasar, quasi-stellar object, redshift, Arp, Gunn
Wallis, Brad D.	Tests of Kodak 2475 Recording Film	10	1971	film, Kodak, photography, amateur, telescope, galaxy, cluster
Provin, Robert	Observational Notes on the Leo I Cloud	10	1971	Cloud, Leo 1, observe, cluster, elliptical, galaxy
Corwin, Harold G.				astrology, sign, house, zodiac, Ptolemy, pseudo
Reaves, Gibson	The Rise and Fall of Astrology	11	1971	Aztec, calendar, stone, Mexico, Indian, astrology, Mexico
Arana, Louis R.	The Aztec Calendar Stone Observations of Mercury: Past and Present	11	1971	
Smith, Ronald L.	Observational Notes on the Canes Venatici I Cloud	11	1971	Mercury, observe, Herschel, rotation, Sun
Corwin, Harold G.				observe, cloud, Venatici I, galaxy, cluster
Roques, Paul E.	The True Anno Domini	12	1971	Christ, Rome, Caesar, Augustus, Herod, birth
Kaufmann, William J.	The Foundations of Gravitational Theory	12	1971	gravity, theory, eclipse, predict, Kepler, planetary, motion, Newton
Duncan, Douglas	Schmidt Telescope and Modern Astronomy	1	1972	telescope, Schmidt, Palomar, refractor, design
Westbrooke, William J.	Lunar Occultations of the Planets	1	1972	moon, occultation, Bessel, Aldebaran, Saturn, Mars
Kaufmann, William J.	The Foundations of General Relativity	1	1972	Einstein, relativity, general, special, space time, vector, geodesic
Dickinson, Terence	Beneath the Clouds of Venus	2	1972	Venus, atmosphere, Mariner, clouds, radio, telescope, rotation
Richardson, Robert S.	A Hole in Hermes? Across Twenty-Two Miles of Canyon	2	1972	Mercury, hole, Verne, Journey to the Center of the Earth, fiction, gravity survey, Michelson, light, distance, Wilson, San Gabriel
Roques, Paul E.				Orion, constellation, Taurus, myth, religion, Indians, Egypt, Greece, Hindu
Waldron, Richard	The Legends of Orion	3	1972	Einstein, relativity, test, proof, Mercury, orbit, gravity, redshift
Kaufmann, William J.	Experimental Tests of Relativity	3	1972	
Roques, Paul E.	Sundogs, Moondogs and Halos	3	1972	Cirrus, clouds, snow, crystal, shape
Etheridge, Dale A.	Apollo 16 - Pioneer F	3	1972	Apollo, Moon, land, Pioneer, Jupiter
Kaufmann, William J.	The Meaning of the Redshift See the Universe Expand in One Easy (?) Step	4	1972	Doppler, light, distance, Hubble, galaxy, constant, law, cosmology, gravity expand, universe, spectrograph, galaxy, spectrum, cosmology
Roques, Paul E.				

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Wood, Gil	The Backyard Mariner: Lawnchair Travels in Time and Space	4	1972	imagination, moon, Copernicus, Andromeda, Praesepe, travel
Bunton, George W.	Reminiscences of Early Times at Griffith Observatory	5	1972	GO
Kaufmann, William J. Westbrooke, William J.	The Black Hole	5	1972	Black Hole, sun, fuel, neutron, white dwarf, sphere, photon, circle, exit cone
Wheeler, Burritt	Pursuing The Moon	5	1972	Moon, transit, meridian, observe, occultation
Kaufmann, William J.	How I wonder What you are?	6	1972	star, Milky Way, comet, observe
Hixson, Robert L.	Gravitational Waves	6	1972	Einstein, relativity, gravity, waves, light, electromagnetic, observe, black hole
Jakosky, Bruce -	Telescope Gymnastics Eratosthenes and the 7 degree 12' of Alexandria	6	1972	telescope, Moon, sun, observe, amateur, Mars
Kaufmann, William J.	Portrait of an Observatory	7	1972	Egypt, circumference, Eratosthenes, sun, measure
Wallis, Brad	Wormholes and White Holes	7	1972	Lick observatory
Halverson, Craig D. Westbrooke, William J.	Some Interesting Configurations as Jupiter Moves through Sagittarius	7	1972	photon, sphere, Einstein, black hole, wormhole, Rosen, relativity
Roques, Paul E.	Jupiter and Beta Scorpii: One Year Ago	7	1972	Jupiter, Sagittarius, nebula, observe, telescope
Kaufmann, William J.	Finding New Planets	8	1972	Jupiter, occult, Beta Scorpii, observe planet, serendipity, Hencke, ecliptic, blink, Neptune, Uranus
Hollister, C. Warren	The Creation of the Universe	8	1972	Big bang, create, steady, state, theory, Hubble, law, background radiation, quasar, cosmology
Reaves, Gibson Kaufmann, William J.	Columbus Thought It Was Small	9	1972	color, filter, visual, spectrum, photography Columbus, Earth, flat, Isabella, Greece, Spain
Corwin, Harold G.	Galaxies and Quasars Observational Notes on the Canes Venatici II Cloud	9	1972	nebula, galaxy, Cepheid, Hubble, Seyfert, Centaurus, theory
Alter, Dinsmore	Comets and People	10	1972	Milky Way, Canes Venatici, cluster, galaxy
Verschuur, G. L. Turner, B. E.	Radio Astronomical Observations of Interstellar Molecules	10	1972	Halley, comet, ghost, media, pseudoscience, voodoo
Mccray, Richard A.	Appearance and Reality in the History of Science	11	1972	radio, interstellar, molecule, Hydrogen, 21 centimeter radiation, spectrum
DeVorkin, David H.	The New Cosmos (Part 1 of 2)	11	1972	Copernicus, Greece, cosmos, Archimedes, Hipparchus, theory, law, observe, Ptolemy
Mccray, Richard A.	The New Cosmos (Part 2 of 2)	12	1972	brightness, Brahe, distance, Cepheid, galaxy, Andromeda, spectrum, white dwarf x-ray, gamma-ray, infrared, radio, pulsar, radiation
	A Versatile Orrery	12	1972	orrry, design, construction

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Richardson, Robert S.	Milton L. Humason	12	1972	GO, Humason
Peterson, Wesley D.	Janus, The Newest Satellite Saturn's Moon of Mystery	12	1972	Satellite, Janus, Saturn
Hodge, J. T.	Photographing a Total Solar Eclipse	12	1972	Titan, atmosphere, Saturn
Wallis, Brad D.	The New Golden Age of Astronomy	6	1973	Kodak, photograph, amateur, eclipse, exposure, time, equation
Hall, Donald E.	Questionnaire for Telescope and Accessory Evaluation and Performance	1	1973	Golden, Age, astrophysics, Hubble, x-ray, Apollo, Weber, Galileo
DeVorkin, David H. -	Mars - Mariner 9 The Case of the Carpenter's Chronometers	1	1973	questionnaire, amateur, telescope, buy, review, survey
Irwin, John B.	High Energy and Distant Places: Far from the Sirens	2	1973	Mars, Mariner, photo, surface
Krupp, E. C. -	Mariner 9 Mission Summary That Lucky Old Sun Quits	2	1973	Centurion, Anson, Britain, warship, Harrison, navigation, time
Krupp, E. C.	Rolling Along	2	1973	quasi, stellar, redshift, radio, Kellerman, interferometry, galaxy
Schueler, Carl F.	Low - Temperature Astrophysics	3	1973	Mariner, Mars, mission, photo, orbit
Ridpath, Ian	The Stars Always Change	3	1973	Copernicus, anniversary, stamp, Poland, Church, De Revolutionibus
Wallis, Brad D.	Astro-Archaeology (Part 1 of 2)	3	1973	Weber, Einstein, gravity, radiation, temperature, Fairbank, diagram,
Faulkner, John	The Recurrent Novae: Binary Stars in Mortal Embrace	4	1973	accelerometer, wave, detector
Wallis, Brad D.	Astro-Archaeology (Part 2 of 2)	4	1973	star, super, nova, binary, eclipsing, variable
Krupp, E. C.	Underneath the Mayan Moon	4	1973	ancient, archaeology, Egypt, Lockyer, Hipparchus, precession, temple
Heaton, Harold I.	A Montage of Ancient Histories Proper Alignment of the	5	1973	novae, recurrent, binary, Crab, Sagittae, Walker, Herculis, Roche, limit, Kraft, Crawford, radiation, model
Davis, William F.	Equatorial Mounting	5	1973	Stonehenge, Britain, archaeology, Aubrey, Hawkins, solstice, summer, alignment,
Krupp, E. C.	Earthquakes and Mooncakes	5	1973	Mayan, Chichen, Itza
Waldron, Richard Johnson, Thomas J.	The Kingdom of Amon-Re: The Egyptian Sky, 3,000-330 B.C.	6	1973	Maya, Yucatan, civilization, calendar, Venus, eclipse, table
	Color Astrophotography with Small Instruments	6	1973	Galileo, telescope, Darwin, Jeans, planet, Earth, pulsar, Bell, Barnard, hydrogen, Townes, Miller, progress
Matteson, James	Optimize Focal Length of Your Telescope for Astrophotography	6	1973	amateur, telescope, equatorial, mount, instruction
Lorenz, Carmen M.	An Extraordinary Wind	6	1973	China, Shu Cheng, cosmology, Heng, geometry, seismology
				Egypt, myth, creation, god, Amon-Re, Nile, scarab, beetle, Aten, sun, moon, evil, Mars, Venus
				color, photography, amateur, focal, length, exposure
				focal, length, photography, amateur
				Sun, wind, Carrington, storm, temperature, solar, photosphere, radiation, plasma, magnetosphere

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Bell, Trudy E.	"A Labor of Love" Biography of Edward Singleton Holden 1846-1914	7	1973	Holden, Lick, director Missouri, California, Navy, Floyd, observe, sky, Barnard, Colton
Sanford, John	Basic Amateur Astro-Photography	7	1973	Astronomy, amateur, photography, film, Moon, planet, Sun, nebula
Roberds, Wesley M.	On Time	8	1973	day, time, clock, hour, accurate, Flamsteed, observatory, Greenwich, Harrison, navigation, crystal
Dickinson, Terence	Mission to Mercury	8	1973	Mercury, mission, Mariner, density, diameter
Little, Robert T.	The Case for Aperture	8	1973	telescope, amateur, aperture, size, detail
Johnson, Thomas J.	The Amateur Astrophotographer Invades the Realm of Galaxies	8	1973	amateur, photography, picture, galaxy, color
Henzl, Leo	Save Those Negatives	8	1973	negative, film, photography, amateur
Herzbrun, Herman	Come, Seeling Night (Part 1 of 2)	8	1973	GO, planetarium, murder, rape, Doe, Kaufmann, consult, trial
Mulholland, J. Derral	The Mystical Mathematician Who Moved The World	9	1973	Newton, Principia, Copernicus, Kepler, Tycho, planet, motion, Harmony of the world, Dream
Herzbrun, Herman	Come, Seeling Night (Part 2 of 2)	9	1973	GO, murder, rape, Doe, trial, light, Thorvaldson
Verschuur, G. L.	Radio Stars	9	1973	radio, star, Crab, Nebula, Sun, flare, interferometer, Antares, Wade, Hjellming, x-ray
Epstein, Lewis	Pioneer - Jupiter Whiplash Astronomical and Astrological Content of Common Almanacs	9	1973	Jupiter, gravity, assist, Pioneer, mission, demonstration
Winkler, Louis	in Early America	10	1973	America, almanac, astrology, Pierce, calculation, Farmer, tabular, Moon, position, calendar
Marsden, Brian G.	Comet Kohoutek (1973f): Prospects for Observations	10	1973	Kohoutek, comet, observe, sky, telescope, amateur
Hodge, J. T.	Astronomy Note	10	1973	Venus, cloud, rotation, atmosphere, temperature
Krupp, E. C.	Cosmic Rays And Celebrated Bristlecone Pine	11	1973	cosmic, ray, electroscope, particle, Hess, Rutherford, originate, supernova
Waldron, Richard	Some Instruments of Time in Ancient Astronomy	11	1973	celestial, clock, time, ancient, Sun, Egypt, shadow, wedge, annual, motion, earth, transit, polos, dekan, mana, anaphoric
Oriti, Ronald A.	San Juan Capistrano Meteorite: California's First Observed Fall	11	1973	California, meteor, fall, observe, sky, amateur, San Juan, Capistrano, Skurlock, rock navigation, Polynesian,
Bunton, George W.	Primitive Navigation in the Pacific	11	1973	Pacific, chart, Mattang, Rebbilib, zenith, Cook
Yeomans, Donald K.	The History of Cometary Motions	12	1973	Comet, Chaldean, Aristotle, superstition, fear, Luther, Brahe, periodic, motion, Newton, Encke, composition, study
Seslar, Michael	The Optimum Comet Hunting Equipment	12	1973	comet, amateur, telescope, refractor, reflector, focal, length, eyepiece
Clark, Benjamin	The Long-Delayed Radio Echo - A Tool for Astronomy?	12	1973	radio, wave, delay, light, Van Allen, Stomer, belt, Appleton, Moon, reflection, comet, asteroid, echo

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-	Index to Volume 37, 1973	12	1973	GO, index
Underwood, R. S.	The Made to Order Moon	1	1974	Moon, telescope, specification, build, solar, living
	Rainy Day Fun or How to Make			Jupiter, radiation, plasma, synchrotron,
Rather, John D. G.	Your Very Own Iopener	1	1974	radio, emission, Iopener, diagram
Westbrooke, William J.	The Pursuit of Minor Planets In Search of The Ancient Astronomers: A Review of	1	1974	Hencke, asteroid, belt, Trojan, mass, Ceres, Pallas, Vesta, Mercury, search, occultation
Krupp, E. C.	Beyond Stonehenge	1	1974	
Westbrooke, William J.	The Mystery of Pluto Megaliths and The Moon: Eclipse Prediction in the	2	1974	Beyond Stonehenge, book, Hawkins, ancient, religious Pluto, Leverrier, Galle, Lowell, blink, microscope, filar, size, density, diameter, observe, sky, Stonehenge, eclipse, Sun, Moon, archaeology, Megalithic, position, Harvest, Welsh, Scottish
Shipman, Harry L.	Stonehenge Era A New Era In Manned Spaceflight	2	1974	Apollo, Soyuz, United States, Russia, cooperation, Slayton, Skylab, relation, international, Mars, land
Ridolfo, Frank		2	1974	Milky Way, galaxy, structure, spiral, observe, sky, radio, wave, hydrogen, Doppler, arm
Baubleitz, Millard	The Milky Way and Its Spiral Structures	3	1974	archaeology, ancient, supernova, Crab, China, record, Stonehenge, Hawkins
Knight, Pamela R.	Archeological Astronomy and			
Halverson, Craig	Astronomical Archeology	3	1974	
Nichiporuk, Mirjana	On Predicting The Brightness of Net Comets or Why Did Kohoutek Faint?	3	1974	Kohoutek, comet, perihelion, brightness, sky, observe, density, faint telescope, photograph, focal, length, eyepiece, amateur, equation, magnification, microscope
Wallis, Brad D.	Another Alternative to the Guiding Problem	3	1974	Kerr, Einstein, rotating, black, hole, Schwarzschild, ergosphere, flashlight
Kaufmann, William J.	Ergospheres And Rotating Black Holes	3	1974	Daniken, Chariots of the Gods, pseudoscience, Nazca plain, ancient, astronauts, symbol, Tiahuanaco, Maya, Sumerian, archaeology, Bible, Egypt, Peru, Ecuador
Krupp, E. C.	The Von Daniken Phenomenon	4	1974	Kohoutek, comet, observe, sky, telescope, dim, nucleus, theory
Matson, Lawrence R.	The Enigmatic Comet -	4	1974	Mariner, Venus, photo
-	Kohoutek	4	1974	amateur, hobby, telescope, storage, maintenance
	Venus from Mariner 10	4	1974	order, universe, cosmology, thermodynamic, paradox, Olbers, expansion, photon, temperature, time, equilibrium
Roques, Paul E.	How to Live with A Telescope	4	1974	galaxy, Hubble, ellipsoid, spiral, structure, inner, outer, composition, interstellar, medium, model, star, formation
Malville, J. McKim	Time's Arrow and the Expansion of Space	5	1974	black hole, Cygnus, Schwarzschild, stellar, evolution, formation, x-ray, source
Bregman, Joel N.	Spiral Galaxies, the Pinwheels of the Universe	5	1974	
Flannery, Brian P.	Cygnus X-1, A Black Hole Discovered?	5	1974	

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Whitehead, A. Bruce	The Photomosaic Globe of Mars	6	1974	Mariner, Mars, mission, globe, assembly, photomosaic, build, photo star, formation, nebula, Star Trek, molecule, infrared, observation, cloud, protostar
Evans, Neal J. Zuckerman, Benjamin M.	A Modern Look at Star Formation	7	1974	quasar, Hubble, Doppler, redshift, observe, luminosity, galaxy
Shostak, Seth	Quasars: Can They Shift for Themselves?	7	1974	Lost Discoveries, Ronan, Antikythera, review, book, Megalithic
Krupp, E. C.	Misplacing the Past: A Review of Lost Discoveries	7	1974	International Date line, meridian, date, time, Greenwich
Wylie, Paul E.	The International Date Line	7	1974	Jupiter, atmosphere, methane, ammonia, equator, observe, color, photo, Pioneer
Halverson, Craig	A New Look at Jupiter, The "Hot" Planet	7	1974	Pendeli, observatory, Greece, Newall, telescope, research
Nigiotis, Ted	Astronomy Note: Pendeli - Center for Greek Astronomical Research	7	1974	universe, machine, Cosmos, proton, neutron, force, temperature, chemistry, biology, intelligence, evolution
Papagiannis, Michael D.	Could You Build A Better Universe?	8	1974	Zeti Tauri, Crab, nebula, supernova, guest, star, China, Bevis, Slipher, distance, expansion, Bell, pulsar
Irwin, John. B.	The Case of the Exploding Crab	8	1974	life, hydrogen, radiation, 21cm, extraterrestrial, search, Planck, radio, Bell, pulsar, LGM, Cyclops
Verschuur, G. L.	Reflections On The Search for Extraterrestrial Life	9	1974	universe, flat, Copernicus, Newton, expand, Wallace, Hubble, Doppler, spectra, galaxy
Underwood, Ralph S.	Three Faces of the Universe	9	1974	Aristarchus, Moon, sun, transit, Kepler, Venus, distance, Mercury, Wales, Newcomb
Fernie, J. D.	Transits and Travels, Trials and Tribulations	10	1974	Moon, hydrogen, escape velocity, Kuiper, Titan, atmosphere, Ganymede, Jupiter, Saturn, water, methane, ammonia, evolution, life
Benford, Gregory	The Large Moons: Life as We Don't Know it "Garblings and Perversions": The Dudley Observatory Controversy	10	1974	Dudley, observatory, Gould, Cambridge, Massachusetts, Bache, Armsby, controversy, argument
Bell, Trudy E.	Sun and Stones on Medicine Mountain	11	1974	Britain, Megalithic, Stonehenge, alignment, Sun, Moon, solstice, Medicine Wheel, season, Indian
Krupp, E. C.	The Leviathan of Parsonstown - An Amateur Astronomer's Dream	11	1974	Parson, amateur, Rosse, telescope, build, Leviathan, mirror, observe
Hirshfeld, Alan W. Golden, Leslie M.	Simplicity vs. Human Nature: The Acceptance of the Copernican Theory	12	1974	Copernicus, revolution, amateur, photo, Moon
-	Amateur Astrophotography	12	1974	geocentric, heliocentric, Aristotle, Ptolemy, Galileo, universe, center, Rome, church
-	Index to Volume 38, 1974	12	1974	amateur, photo, Moon
Young, Arthur	The Structure of Scientific Thought	1	1975	GO, index
				physics, Newton, intuition, evidence, Constitution, Laplace

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Richardson, Robert S.	Are there "Bears" On Mars?	1	1975	Mars, life, water, bear, Tardigrada horoscope, zodiac, validity, destiny, sign, house, ecliptic, Greece,
Winkler, Louis	Astronomical and Nonmystical Aspects of Horoscopy	1	1975	Lilly, astrology, Moon, Druid, Kiaran, Callanish, stone,
Krupp, E. C.	Mourners for the Moon	1	1975	Megalithic, mourner
Upton, Edward K. L. -	The Great Earthquake Hoax Amateur Photography	1	1975	Jupiter, effect, San Andreas, earthquake, alignment, sunspot, planet, Pluto
Hollister, Warren	Giordano Bruno and the Infinite Universe	2	1975	Amateur, photo Bruno, monk, burn, church, Renaissance, Italy, heliocentric, Copernicus, infinite, universe
Staal, Julius D. W.	The Prehistoric Stars of Imperial China	2	1975	China, Shu King, stars, astronomy, Yao, constellation, mansion, paranatellion, tortoise, dragon, bird, tiger
Cleminshaw, C. H.	Some of History's Great Astronomers	3	1975	GO, statue, Monument, Hipparchus, observation, position, object, sky, motion, Copernicus, Ptolemaic, Galileo, telescope, Kepler, law, Newton, gravity, law, motion, Herschel, Uranus, satellite
Richardson, Robert S.	Casual Comments on Exact Measurements	3	1975	measurement, standard, Kelvin, Henry, distance, meter
H., David Menke, JoAnn Wylie, Paul E.	Life On The Planet Jupiter Deriving the Law of Gravitation	3	1975	life, Jupiter, condition, atmosphere, pressure, temperature, evolution
Cleminshaw, C. H.	The Julian Period	4	1975	gravity, law, Newton, motion, equation calendar, Julian, Caesar, Scaliger, period, cycle, Moon
Krupp, E. C.	The Ring at Castle Rigg	4	1975	Britain, stone, megalithic, Castle Rigg, Carles
Oriti, Ronald A.	How to Recognize a Meteorite Discovering Black Holes by Optical Observations of X-Ray Binaries	4	1975	meteorite, identification, stone, type, iron, achondrites, chondrites, ataxites, pallasite, steps
Whelan, John	Black Holes, Neutron Stars, And the Green, Green Grass	4	1975	Black Hole, observe, Einstein, x-ray, Centaurus, velocity, radial, Cygnus explode, stars, neutron, black hole, grass,
Wheeler, J. Craig		5	1975	Big Bang, dwarf, mass, pulsar
Krupp, E. C.	Astronomical Msings (sp)	5	1975	Greek, muse, Harvard College Observatory, Pickering, women
Michalitsanos, Andrew G.	The Sun's Turbulent Atmosphere Spots, Magnetism and	6	1975	Sun, atmosphere, spectrum, temperature, chromosphere, magnetic, field, sunspot
Evans, David S.	Fireworks: The Story of the Red			Dwarf, Ceti, flare, star,
Moffett, Thomas J.	Dwarf Flare Stars	6	1975	Lovell, radio, light, curve, spot
Irwin, John B.	The Case of the Back and Forth Passenger	7	1975	Earth, motion, passenger, ship, Newton, rotation, spin, galactic, motion, solar
Hawley, Steven A.	The Planetary Nebulae - An Astronomer's Standard Candle?	7	1975	nebula, Herschel, planetary, ring, spectrum, velocity

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Silk, Joseph	The Evolution of the Universe: A Layperson's Guide to the Big Bang	7	1975	Big Bang, evolution, cosmology, Hubble, expand, gravity, thermonuclear, Gamov, black body radiation, black hole, microwave, collapse, expand time, standard clock, Newton, Copernican, Earth, sun, rotation, Greenwich, gravity
Mulholland, J. Derral	The Search for Time	8	1975	clock, atomic Earth, Moon, gravity, center of mass, atmosphere, Mars, life Hynek, UFO, alien, life, Condon, bad, eyewitness Milky Way, constellations, star, observe, sky, telescope, binoculars
Sperling, Norm Verschuur, G. L. (sp)	Earth Science for Martians Hynek and the U.F.O. Controversy (A Commentary)	8	1975	The Great Earthquake Hoax, Jupiter Effect, sunspot, futurologist supernova, Taurus, Chinese, observe, sky, ozone, destroy, cosmic ray Arizona, meteorite, crater, main mass, length, diameter calendar, solar, equinox, Stonehenge, Thom
Upton, Edward K.	The Summer Milky Way	8	1975	eyepiece, care, clean origin, evolution,
Gribbin, John Verschuur, Gerrit L.	It's The Real Thing (A Reply) Stardeath	8	1975	Evans, Zuckerman, rocky, gas, planet, Pluto, Moon, formation
Oriti, Ronald A.	A Photographic Expedition to the Arizona Meteorite Crater	9	1975	planet, farthest, Planet X, Pluto, Neptune, orbit
Krupp, E. C.	Bisecting the Year	9	1975	Britain, stone, Long Meg, summer, solstice
Roques, Paul E.	Astronomical Instrument Care: Part 1 - The Eyepiece	9	1975	objective lens, cell, mirror, removal, care, clean cosmology, universe, expand, Hubble, Milky Way, Big Bang
Crutcher, Richard M.	The Origin and Evolution of the Solar System	10	1975	Russia, Tunguska, asteroid, Siberia, impact, comet, anti- matter, nuclear, black hole, carbonaceous chondrite, hypothesis
Upton, Edward K. L.	The Farthest Planet	10	1975	GO, photo Comet, 1975h, Kobayashi-Berger-Milon objective lens, clean, care, collimation, refractor, reflecting Nova, Cygni, observe, sky, telescope, photograph, Mayer
Krupp, E. C.	Long Meg and Her Daughters	10	1975	Rollright, stone, Britain, legend, folklore
Roques, Paul E.	Astronomical Instrument Care: Part 2 - The Objective	10	1975	Christmas, star, Christ, eclipse, Moon, Bethlehem, supernova, conjunction
Tinsley, Beatrice M.	Expanding Universe	11	1975	telescope, buy, retail, store, quality
Oriti, Ronald A.	The Tunguska Event	11	1975	GO, index
-	Planetarium Directors' Meeting	11	1975	
Oriti, Ronald A.	New Comet Found	11	1975	
Roques, Paul E.	Astronomical Instrument Care: Part 3 - Collimation	11	1975	
Upton, Edward K. L.	The Night of the Nova	11	1975	
	Rollright and the Whispering Knights	12	1975	
Krupp, E. C.				
Oriti, Ronald A.	The Star of Bethlehem	12	1975	
	Buying a Christmas Telescope			
Roques, Paul E.	- Satisfaction Guaranteed?	12	1975	
-	Index to Volume 39, 1975	12	1975	

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N., Peter Wilkinson, Althea	Solar Activity and its Influence on Weather	1	1976	Sun, solar activity, weather, sunspot, Hale, Allen, belt, climatic, Brown
McCarthy, Terrence M.	Where do We Go From Here? Thoughts on the Proposed Colonization of Space	1	1976	Earth, people, space, colonization, pollution, L5, O'Neill, NASA, Model 1 astrolabe, time, height, compass, equinox, solstice, mater, rete, typanum, alidade, Ptolemy, Moslem
Koppany, Robert	The Astrolabe	1	1976	mounting, care, clean
	Astronomical Instrument Care: Part 4 - The Mounting	1	1976	Hubble, galaxy, Rosse, spiral, labyrinth, nebula, classification, elliptical, spiral, irregular
Roques, Paul E.	Christening the Galaxies Some Thoughts On Flying Saucers and UFOs	2	1976	UFO, report, eyewitness, unexplained, believe, contact, alien, imagination
Oriti, Ronald A.	Astronomical Instrument Care: Part 5 - Balance	2	1976	Balance, care, clean
	Relations Between the Periods of Mercury, Venus and Earth	3	1976	Venus, Mercury, Earth, rotation, period, orbital, synodic, equation, day
Cleminshaw, C. H.	Celestial Monsters	3	1976	celestial, monsters, Pare, comet, Savoy, evil
-	Amateur Astrophotography	3	1976	amateur, photo
Krupp, E. C.	Stonehenge: The New Astronomy (A Brief Introduction)	4	1976	Stonehenge, Britain, Megalithic, Lockyer, Newham, summer, solstice
Bunton, George	Stonehenge A Fifty-Six Year Eclipse Cycle?	4	1976	Stonehenge, Hawkin, eclipse, cycle, carbon-dating, tropical year, equation, lunation
W. Ciotti, Joseph E.	From the Wastepaper Basket to the Smithsonian	4	1976	Mayer, discovery, ARCTU, meteor, tracking, camera, automatic, nova, Cygni ARTU, SCAMP, Self-Contained Astronomical Mobile Platform, trailer, desert
Mayer, Ben	You Can Take it With You	4	1976	GO
-	The 1976 Winners	5	1976	radiation, belt, magnetic field, Earth, Sputnik, Van Allen, cosmic radiation, magnetism, flare
Stern, David P.	Beyond the Radiation Belt	6	1976	Wittenberg, sun, sunspot, Welser, inquisition, motion, surface, Wilson, magnetic field, theory, Herschel
Walter, R. Kenneth	Trouble Spots on the Sun	6	1976	Quasars, quasi stellar, radio source, Sandage, Schmidt, velocity, red shift, spectrum, Hubble, ultraviolet, energy
Pasachoff, Jay M.	Quasars	6	1976	Britain, circle, stone, Thom, Megalithic, geometry
Krupp, E. C.	Megalithic Eggs	6	1976	Greenwood, Harvard, Newton, Europe, professor, quadrant, alcoholism
	From the Jaws of Victory: The Checkered Career of Isaac Greenwood	7	1976	comet, chasing, observe, sky, telescope, West, amateur
Bell, Trudy E.	The Adventure of Chasing a Comet	7	1976	Comet, photo
Seeberg, Stanley J.	Comet West - A Photographers Comet	7	1976	
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Dengler, Alyce	A Nature-Faker's Guide to Interpretation in the Rough	7	1976	National Park Service, interpreter, appearance, audience, program, speech Sun, neutrino, mass, search, Pauli, equation, Fermi, temperature, SNU, Bachcall, Davis, Chlorine
Tenn, Joe S. Oriti, Ronald A.	The Search for Solar Neutrinos Tom Cragg Moves to Australia	8 8	1976 1976	Cragg, GO, Wilson, Australia Observer, log book, notes, information, good
Roques, Paul E.	The Observer's Log Book	8	1976	Cephei, variable star, contact binaries, Hershey, discovery
Heintz, W. D. Krupp, E. C.	The Story of VW Cephei A New Full Moon	8 8	1976 1976	Moon, travel, GO, model
Snow, Theodore P. Sever, Thomas Lee	The Interstellar Medium: Much Ado About Nothing? The Obsession with the Star Sirius	9 9	1976 1976	interstellar medium, matter, universe, dust, spectrum, hydrogen, Copernicus, absorption, element Sirius, Dogon, Egypt, Mexico, China, Babylon, Maya, Indian, god, temple Dogon, Sirius, Temple, The Sirius Mystery, cosmology, Oannes
Krupp, E. C.	On Not Taking it Seriously	9	1976	Astronomy, usefulness, money, public, image, Einstein, benefit, clock, practical, impractical, politics, selling
Irwin, John B.	The Case for Impractical Science	10	1976	Riverside, telescope, amateur, makers, Polaris Astronomical Society, award, observe sky
Seldon, Sandra	The Eighth Annual Riverside Telescope Makers Conference	10	1976	earthquake, starquake, moonquake, magnitude, intensity, Wood- Neumann scale, faults
Oriti, Ronald A. Oriti, Barbara E. Duncan, Douglas K.	Earthquakes, Moonquakes and Starquakes (Part 1 of 2)	10	1976	speed, light, Roemer, Bradley, measure, method, terrestrial, Michelson, experiment
Hawley, Steven A. Oriti, Ronald A. Oriti, Barbara E.	Light Earthquakes, Moonquakes and Starquakes (Part 2 of 2)	11 11	1976 1976	earthquake, moonquake, starquake, tectonics, prediction, trigger, pulsar elliptic, equation, eccentricity, Britain, Thom, Megalithic, geometric, stone
Krupp, E. C.	An Elliptical Question	11	1976	Big Bang, galaxy, Einstein, temperature, cloud, gravity, Jeans length, turbulence
Zelik, Michael	The Big Bang and the Birth of Galaxies	12	1976	Christmas, star, Greek, astar, constellation, linguistic
Rodman, Robert	A Linguistic Note on the Christmas Star	12	1976	
Van Millingen, B. A. -	Astronomy and Tumuli Surrounding Stonehenge - An Investigation Index to Volume 40, 1976	12	1976	Stonehenge, Britain, Thom, Tumli, coordinate, azimuth, histogram
Rubin, Alan Edward	The Great Depression A Proposed Supernova	1	1977	GO, index meteorite, asteroid, crater, Arizona, siderite, Barringer, fossil
Sanford, John	Identification Atlas	1	1977	supernova, atlas, identification, handbook
Jones, Robert E.	Exposures for Unguided Field Photography	1	1977	observe, photography, camera, equation

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Jones, Robert E.	Printing Star Field Photographs The Case of the Peculiar Pickets	1	1977	observe, photography, film, print, equation spectroscopy, spectrogram, absorption, Hydrogen, element
Irwin, John	Nikola Tesla and His Famous Coil	2	1977	Tesla, coil, GO, ball, New York, Colorado, exhibit
Koppany, Bob	The Tesla Coil: Its Care and Feeding	2	1977	Tesla, coil, GO, exhibit, create, guide
Barton, Mark	Shrouded in Mystery: The Exploration of Venus (Part 1 of 2)	2	1977	Venus, exploration, yellow, temperature, spin, radar
Benford, Gregory	Shrouded in Mystery: Venus and Planetary Evolution (Part 2 of 2)	3	1977	greenhouse, Earth, Venus, Carbon Dioxide, clouds, terraform
Benford, Gregory	Seventeenth Century Discoveries the Impact of the “New Astronomie”	3	1977	Kepler, Galileo, Copernicus, orbit, Donne, center, Earth, telescope
Berger, Benita	Starfolk	4	1977	life, alien, search, Big Bang, Hydrogen, radio, contact
Verschuur, Gerrit L.	Thiotimoline and Spoonbending: the Tachyonic Link	4	1977	Geller, cosmic, ray, Einstein, Relativity
Gribbin, John	- The 1977 Winners	5	1977	GO
Upton, Edward K. L.	The Leonids Were Dead, They Said	5	1977	Leonid, asteroid, meteor, observe
Krupp, E. C.	Cahokia: Corn, Commerce and the Cosmos	5	1977	Itza, Caracol, Cahokia, Illinois, Indian, city, agriculture
Gribbin, John	How “Normal” is Our Sun? The Influence of Nonscientific Literature on the Development of Astronomy	6	1977	sun, milky way, fusion, nucleosynthesis, neutrino, spot
Reaves, Gibson	A Flip-top Observatory Cassini IV at the Paris Observatory, 1785-1793: An	6	1977	Bible, Copernicus, Laplace, Buck Rogers observatory, build, telescope, observe, guide
Mayer, Ben	Institution revolutionized & Revolutionized	6	1977	Cassini, France, Louis XIV, Royal Observatory, revolution, Lakanal
Chapin, Seymour L.	The von Daniken Phenomenon	7	1977	pseudoscience, Daniken, Inca, Nazca, Indian, alien, Maya, Chichen, Bible, Egypt planet, guide, create, eccentricity, orbit, precession
Krupp, E. C.	Installation of Your New Planet	8	1977	Rings, Saturn, Uranus, Neptune, Elliot, Herschel
Ball, Michael T.	Lords of the Rings	8	1977	Kepler, Sun, cloud, volcano, observe
Lunan, Duncan	A Dust Cloud Orbiting the Sun?	8	1977	Mexico, Maya, Chichen Itza, symbol, myth, religion, Mesoamerica,
Krupp, E. C.	The Observatory of Kukulcan The Case of the Celestial Shadows	9	1977	Kukulcan, Caracol, Indian Moon, Sun, Greece, Earth, Aristarchus, Aristotle, Eratosthenes
Irwin, John B.		10	1977	

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Mayer, Ben	Cygnid Swansong: A Nova Revisited	10	1977	Cygnid Swansong, nova, observe, photography
Luckerman, Marvin Arnold	More Sirius Difficulties	10	1977	Egypt, Sirius, Dogon, Nile, Censorinus, Rome, Venus
Tucker, Wallace H.	Astronomy's New Superstars: Supergiant Galaxies	11	1977	galaxy, Milky Way, Hubble, Local Group, x-ray
Gribbin, John	Cosmic Gushers: White Holes and the Universe	11	1977	white hole, black hole, Narlikar, Einstein, Seyfert, elliptical, galaxy
Selden, Sandra Verschuur, Gerrit L.	The Ninth Annual Riverside Telescope Makers' Conference	11	1977	GO, Riverside, telescope, create, conference
	The Gaea Hypothesis - Our Living Planet	12	1977	Gaea, life, Lovelock, Margulis, atmosphere, plant, Venus, ozone, Sun equipment, photograph, compare, blink, Carousel, camera
Mayer, Ben	The Blinking Astronomer	12	1977	
Pesch, Roland	The Last Sirius Inquiry?	12	1977	Sirius, Dogon, Mali, symbol, myth, religion
Thompson, David J.	Gamma Ray Astronomy: through a Gas Darkly	1	1978	Gamma ray, x-ray, Milky Way, Crab, nebula, pulsar, Cygnus
Rubin, Alan Edward	The Missing Planet	1	1978	planet, asteroid, minor planet, Piazzi, Olbers, belt, meteor
	Descent in the Maelstrom: A Look into the Center of the Galaxy	2	1978	Milky Way, galaxy, nucleus, radiation, radio, Oort, Rougar, Sagittarius, arm, Big Bang
Preston, Douglas				thermodynamic, Clausius, entropy, Newton, Boltzmann, Hubble, constant, spectra, density, open, close
Layzer, David	Is the Universe Running Down?	2	1978	Egypt, Pyramid, geometry, Cole, Smyth, sundial
Krupp, E. C.	Great Pyramid Astronomy	3	1978	meridian, Latin, Naval Observatory, standard, noon, midnight
Oriti, Ronald A.	Noon, Midnight - A.M. or P.M. Towers Reaching to the Skies: The First American Astronomical Society	3	1978	Astronomical Society, New York, Sidereal Messenger, White, first, Jupiter, minor planet
Bell, Trudy E.		4	1978	
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 1 of 18)	4	1978	Egypt, myth, god, religion
	The Great Columbus Day Eclipse	5	1978	eclipse, sun, Moon, observe, Fairwind, cruise
Krupp, E. C. Day, Mike Day, George	The Lunar Influence - Oh, Divine Moon	5	1978	Moon, 2001, Clarke, calendar, Greece
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 2 of 18)	5	1978	Egypt, religion, myth, god, Pronaos, inscription, calendar
Winkler, Louis	Is Astrology Valid?	6	1978	Astrology, pseudoscience, horoscope, Greece, health, agriculture, sun, planet, moon
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 3 of 18)	6	1978	Egypt, religion, god, myth, Venus, zodiac, Mercury, symbol, constellation

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-	The 1978 Winners	7	1978	GO nuclear, fusion, physics, black box, theoretical, Kelvin, magnetic, Sun, atmosphere, Gamov, Bethe, proton, chain, evolution
Bishop, Jeanne E.	The Golden Era of Theoretical Physics and the Black Box of Stellar Energy	7	1978	
Krupp, E. C.	A Cosmic Blowtorch and a Supermassive Black Hole	7	1978	black hole, galaxy, elliptical, Virgo, cluster life, Rome, alien, Aristotle, Galileo, Fontenelle, Huygens, Whewell, Shapley,
Bell, Trudy E.	The Grand Analogy: History of the Idea of Extraterrestrial Life	8	1978	
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 4 of 18)	8	1978	search
Seslar, Mike	Kohoutek in Perspective	9	1978	Egypt, myth, god, religion, Sun, Ra, divinity Kohoutek, comet, observe, Marsden
Krupp, E. C.	Something New Under the Stars	9	1978	Brackett, Pomona, Steele, observatory
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 5 of 18)	9	1978	Egypt, myth, god, religion, Moon, Dendera, Horus
McMenomy, Christe Ann	The SPHERE of John of Hollywood in the Renaissance: the 1538 Edition and Philipp Melanchthon's Introduction	10	1978	John of Hollywood, Sphere, terms, celestial, De Sphaera
Krupp, E. C.	A Satellite on the Styx	10	1978	Pluto, satellite, Christy, observe, name
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 6 of 18)	10	1978	Osiris, moon, day, Isis, Egypt, religion, god, myth
Howell, J. Andreas	Apollo to Astrobleme	11	1978	Apollo, meteor, asteroid, Eros, observe, archetype, Earth, Wetherill
Oriti, Ronald A.	The Great Moon Hoax and Other Extraordinary Astronomical Delusions of the Crowd, etc.	11	1978	Moon, newspaper, New York Sun, Locke, Herschel, Wells, War of the Worlds, radio, Mars, canal
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 7 of 18)	11	1978	Egypt, myth, religion, god, Sun, zodiac, Dendera
Ciotti, Joseph E.	The Magi's Star: Misconceptions and New Suggestions	12	1978	Magi, Bethlehem, Christ, religion, god, birth, Christmas, astrology, Uranus
Reyman, Jonathan E.	The Winter Solstice at Pueblo Bonito	12	1978	Anasazi, Indian, Pueblo, Bonito, Chaco, solstice
Reyman, Jonathan E.	The Winter Solstice at Pueblo Bonito (Part 2 of 2)	1	1979	Mexico, pueblo, Bonito, solstice, Chacoan, Anasazi
Briggs, Kenneth W.	Across the Sun: Transits of Mercury and Venus	1	1979	Venus, Mercury, sun, transit, Horrocks, Legentil, observe
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 8 of 18)	1	1979	Egypt, Ptolemaic, Venus, Greece, Rome, god, myth, religion

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Oberg, James E.	Strange Science Bedfellows: Ancient Eclipses and Modern Astronomy	2	1979	eclipse, Sun, moon, annular, Greece, Rome, god, omen
Oriti, Ronald A.	The Scientific Value of Total Eclipses of the Sun	2	1979	Sun, eclipse, moon, total, Einstein, Lyot
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 9 of 18)	2	1979	Mars, Venus, Saturn, Egypt, myth, god, Jupiter
Mosley, John	Hints on Viewing the Partially Eclipsed Sun	2	1979	Galileo, observe, telescope, Sun, eclipse
Irwin, John B.	The Case of the Invisible Center Aesthetic Astronomy Beyond	3	1979	Copernicus, Shapley, Hubble, Milky Way, Jansky, Messier
Miner, H. Craig	Aesthetic Astronomy Beyond the Messier Objects	3	1979	telescope, Messier, Murphy, China, nebula, observe
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 10 of 18)	3	1979	Egypt, myth, god, Mars, Book of the Dead, morning star, evening star, Venus
Rubin, Alan Edward	Glass Menagerie	4	1979	tektites, volcano, Moon,
Court, Robert	Black Holes and Remembrance of Things Past	4	1979	meteor, meteorite, Australia, LANDSAT Black hole, binary, Wing, Tunguska, meteor, Russia
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 11 of 18)	4	1979	constellation, Egypt, religion, myth, god, Sirius, Orion, Isis
Mims, Sam S.	The High Frequency of Binary Stars	5	1979	binary, frequency, double, mass, evolution, number, spectral
Gribbin, John	Parallel Universes: Sideways in Time	5	1979	parallel, universe, time, cosmology, big bang, black hole, quantum, light, particle, Piper,
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 12 of 18)	5	1979	Asimov
Shaw, Robert	The Discovery of Supernovae	6	1979	Egypt, myth, god, religion, Thebes,
McDermott, Ashley	The Tenth Annual Riverside Telescope Makers Conference	6	1979	Christian, Ramses
Thomas	(27-28 May 1978)	6	1979	supernovae, Hartwig, Milky Way, Crab
-	The View from Voyager	6	1979	Nebula, Zwicky
Cook, Anthony	The Eclipse of 26 February 1979	6	1979	telescope, build, Riverside, GO
-	The 1979 Winners	7	1979	Voyager, Jupiter
Papagiannis, Michael D.	The Search for Life in the Universe	7	1979	eclipse, Moon, Sun, total, observe, Canada
Hostetter, H. Clyde	The Bowl of Ishtar Comets, Almanacs, and the	7	1979	GO
Winkler, Louis	Dead	8	1979	life, alien, colony, cosmology, radio, evolution, Big Bang, galaxy, Pioneer
	In Search of New Worlds:			Babylon, bowl, Ishtar, Saudi Arabia, god,
Mosley, John	Columbus and Apollo	8	1979	religion, myth
				comet, death, almanac, astrology, pseudo, myth, literature
				Apollo, Columbus, Moon, exploration, Spain, New World

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Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 13 of 18)	8	1979	Egypt, myth, religion, god, Sirius, calendar, Rexit Caroll, Velikovsky, cosmology, Worlds in Collision, pseudo, astrology, psychology, comet, Venus
Chriss, Michael	Scientists in Wonderland: The Strange Case of Dr. Velikovsky	9	1979	
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 14 of 18)	9	1979	Egypt, myth, god, religion, Isis, Sothis, Sirius, constellation, decanal Edlen, moon, sun, eclipse, corona, magnetic field, hole, temperature, wind
Foukal, Peter	Portrait of a Useful Star Another Bundle of Wonders from Voyager I	10	1979	
-	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 15 of 18)	10	1979	Voyager, Jupiter
Brugsch, Heinrich	Madness or Genius? The Method of Johannes Kepler	11	1979	Egypt, myth, god, religion, constellation, Book of the Dead, Ra, northern group Kepler, Astronomia Nova, planetary, law, motion, harmony, gravity, Newton meteor, collision, Earth, Bible, Joshua, Arizona, size
Crane, Reiko Hibbett				
Oriti, Ronald A.	The Bombarded Earth	11	1979	
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 16 of 18)	11	1979	Egypt, religion, god, myth, constellation, Decan, Xet-mu
Matilsky, Terry	The Entropy of the Universe or (!) Why They Couldn't Put Humpty Dumpty Together Again	12	1979	Humpty Dumpty, egg, chicken, entropy, Milky Way, universe, Big Bang, open, closed, cosmology
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 17 of 18)	12	1979	Egypt, religion, god, myth, rising, Decan, Shin-bone, goddess, Nut Earth, magnetic, field, Hartmann, compass,
Rubin, Alan Edward	The Magnetic Earth	1	1980	Gilbert, sediment, polarity, Cretaceous
Finkel, David	Wormholes on the Wane	1	1980	wormhole, Einstein, relativity, black hole
Brugsch, Heinrich	Astronomical and Astrological Inscriptions on Ancient Egyptian Monuments (Part 18 of 18)	1	1980	Egypt, myth, religion, god, Hour Table, Ramses, clock
Persch, Peter	Astronomy: An Apologia	1	1980	research, public, funding, Hindsight, government, understand
Irwin, John	The Case of the Spinning Spirals	2	1980	galaxy, spiral, NGC 3031, arm, M 81, radio, island, Herschel, Maanen, Slipher, Hubble, trail, lead
Oriti, Ronald A.	Who Ever Heard of Amalthea	2	1980	Amalthea, Jupiter, satellite, Greece, Barnard
Purdum, Ginger Richardson, Robert S.	The Light from Arcturus	2	1980	Arcturus, Bible, Osler, religion, star, symbol, Sirius, Pleiades, Houseman

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Bishop, Jeanne E.	Astronomy Education in the United States: Out from Under a Black Cloud	3	1980	Astronomy, education, United States, public, colony, elementary, Committee of Ten, NASA, planetarium
Oriti, Robert A.	Ganymede: Thirty Years After	3	1980	Ganymede, Jupiter, Voyager, Lowell, Mars minor planet, asteroid, moon, satellite, Hebe, observe, Large Space Telescope
Maley, Paul D.	Even Asteroids May Have Moons	3	1980	
	Like Christmas Snowflakes Down a Chimney: The Discovery of Aberration of Starlight	4	1980	Bradley, Molyneux, Draconis, aberration, photon, parallax, Hooke, Cassini star, Jupiter, Voyager, brown dwarf, ideal gas, temperature, quantum mechanic, Pioneer, degenerate
Bell, Trudy E.	Jupiter: Always a Starsmaid, Never a Star	4	1980	GO, Griffith, Santa Monica Mountain, Felis, Bell, Mowry, religion
Zimmermann, R. Erik	Lost In Space	5	1980	Voyager, mission control, team, sun, track, Alpha Centauri, signal, Canopus telescope, observe, Riverside, GO, amateur
McDermott, Ashley Thomas	The Eleventh Annual Riverside Telescope Makers Conference	5	1980	Hill, Stonehenge, Maryhill, Washington, Stone, Kousbaugh, replica, moon
Piini, Ernest W.	The Stonehenge Replica at Maryhill	6	1980	eclipse, Sun, moon, observe, total, India, ice age, Earth,
Dryer, Ivan	Stalking the Wild Eclipse	6	1980	Milankovitch, continent, drift, precession, period, oxygen
Gribbin, John Barker, William A.	Waiting for the Next Ice Age	7	1980	Mars, moon, Gulliver's Travels, Phobos, Deimos, Kepler, Newton, Swift
Maggiora, Debra	Who Told Jonathan Swift About the Moons of Mars	7	1980	
Read, Nicholas	A Capitol Planetarium	7	1980	Smithsonian, Air and Space, planetarium, Washington DC., Zeiss, Spacearium
Mims, Sam S.	Chasing Rainbows: the Early Development of Astronomical Spectroscopy	8	1980	Newton, spectroscopy, white light, refraction, Herschel, Wollaston, Fraunhofer, Doppler, Kirchhoff, dark, line
O'Keefe, John A.	Tektites: The controversy Continues	8	1980	tektite, meteorite, Earth, Moon, Apollo
-	P. P. A at Griffith Observatory	8	1980	GO,
Purdam, Ginger Richardson, Robert S.	Naked Eye Objects: Your Favorites?	8	1980	constellation, Pleiades, moon, Andromeda, Venus
-	International Planetarium Society Meets at Alder Planetarium	8	1980	
Cohen, Martin	The Cosmic Hourglasses	9	1980	GO, planetarium
Steffey, Philip C.	Some Serious Astronomy in the "Sirius Mystery"	9	1980	hourglass, nebula, Red Rectangle, Ant, Cygnus Egg, V645 Cygni
-	The 1980 Winners	10	1980	Sirius, Dogon, Temple, religion, myth, god, alien
Reed, George	The Man Who Was 'Murdered' by Newton	10	1980	GO
Mosley, John	Around the Observatory	10	1980	Newton, England, Chaloner, Mint, murder
				GO

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Richardson, Robert S.	Wrong Way Moons	10	1980	moon, mistake, public, advertisement, United States, bible
Silbar, Margaret L.	Is the Sun Really Shrinking?	11	1980	Sun, Helmholtz, Einstein, neutrino, Davis, Shapiro Turkey,
Matossian, Mary Kilbourne	Symbols of Season and the Passage of Time: Barley and Bees in the New Stone Age	11	1980	archaeoastronomy, symbol, season, religion, myth, festival
Mosley, John	Around the Observatory	11	1980	GO
Mosley, John	When Was that Christmas Star?	12	1980	Christmas star, Kepler, Bethlehem, Bible, Christ, religion, Jupiter, Martin, Venus, astrology
Krupp, E. C.	Around the Observatory	12	1980	GO, exhibit
-	Griffith Observer Cumulative Index 1965-1980 Vols. 29-44	12	1980	GO, index
Gribbin, John	The Air We Breathe	1	1981	Air, atmosphere, Mars, Venus, Jupiter, Sun, life
Cohen, Martin	The Shocking Truth About Herbig-Haro Objects	1	1981	Herbig-Haro, gas, star, Lick, Kitt Peak Galileo, lens, Moon, telescope, Venus,
Irwin, John B.	The Case of the Lined Up Lenses	2	1981	Saturn, Sun Christ, religion, star, Christmas, Venus, Mars,
Mosley, John	The Conjunctions of 3-2 B.C.	2	1981	Mercury, Saturn, observe, Bethlehem
-	Baubles, Bangles, and Beads (Adornment for a Plainer Planet)	2	1981	Saturn, Voyager
Bracher, Katherine	Total Solar Eclipses in California	3	1981	Solar, Sun, Moon, eclipse, California, total, Indian, Dearborn
-	Around Saturn's Rings	3	1981	Saturn, Voyager, ring
Gribbin, John	How Galaxies Form	4	1981	Galaxy, Big Bang, Hubble
Krupp, E. C.	Outdistanced by the Dark	4	1981	Cosmology, Hubble, mystery, galaxy
-	Beneath the Rings and Beyond Their Glow	4	1981	Saturn, ring, Voyager
Snow, Theodore P.	Dieting for Stars or How to Lose $10^{25}$ Grams per Day (& Feel Better Too!)	5	1981	star, supernovae, supergiant, Betelgeuse, solar wind, evolution
Croswell, Ken Resse, Ronald Lane Everett, Stevan M.	Triton: Destined to Remain a Mystery	5	1981	Neptune, Triton, moon, Pluto
Mosley, John	J. J. Scaliger and the Julian Period	5	1981	Scaliger, Renaissance, calendar, Julian, Moon dinosaur, extinct, Sun, luminosity, dust, supernovae, meteorite, comet, Iridium
Hartung, Horst	Death of the Dinosaurs An Ancient "Astronomer" on a Relief at Monte Alban	6	1981	Aztec, Mexico, Structure J, Monte Alban
Krupp, E. C.	An Aztec "Calendar" Stone: and Its Celestial Seal of Approval	6	1981	Mexico, Aztec, calendar, stone, Indian, Native American, Sun, myth, god
Tucker, Wallace	Reflections from Indra's Web	7	1981	India, god, myth, religion, Indra, sky, quasar, violence, universe
Krupp, E. C.	More Star Than Ever Before	7	1981	star, Tarantula, nebula, International Ultraviolet Explorer, R136i

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Bracher, Katherine	America's First Solar Eclipse Expedition	7	1981	United States, America, eclipse, Sun, solar, Moon, pilgrim, Penobscot, New York America, United States, telescope, education, Harvard, Winthrop, Rittenhouse, Mather
Yeomans, Donald K.	The Shaky Beginning of North American Astronomy	8	1981	Herschel, comet, minor, Vulcan, planet, Greece, Rome, god, myth, Leverrier Perseids, meteor, observe, shower
Winkler, Louis	Vulcan the Unknown	8	1981	
Morgan, James	Meteor Nights	8	1981	
Barker, William A.	Portraits in the Sky:			
Dreher, Diane E.	Michelangelo and the Sun	8	1981	Sun, Michelangelo, sunspot, Italy
-	The 1981 Winners	9	1981	GO
				radio, astronomy, static, lightning, Jansky, Sun, flare, Reber, Very Large Array, Cygnus
Irwin, John B.	The Case of the Celestial Static	9	1981	
Richardson, Robert S.	Dark Shadow Looming	9	1981	GO, poll, observe, Moon, Venus, Sirius
Barker, William A.	Portraits in the Sky: Sir Winston S. Churchill and Polaris	9	1981	Polaris, Churchill, World War II, politics, Odyssey, Homer
Rubin, Alan				
Edward	The Origin of the Moon	10	1981	Moon, Apollo, Ringwood, origin
Barker, William A.	Portraits in the Sky: Alexander Pope and the White Dwarf	10	1981	Pope, white, dwarf, England, Homer, Eridani
Dreher, Diane E.	Faster than a Speeding Light Beam	10	1981	Light, Einstein, Relativity, quasar, superluminal, radio, telescope
Krupp, E. C.				Density, Deuterium, Big Bang, Galaxy, Hydrogen, Jupiter, cosmology
Lauer, Tod R.	Deuterium and the Destiny of the Universe	11	1981	
Krupp, E. C.	Eros Blows Us a Kiss	11	1981	Asteroid, Eros, Earth, Mars, minor planet
-	Under Maya Skies: A FOTO-UCLA field study tour 13-21 March 1982	11	1981	GO, Maya
Hocking, Thomas W.	New Castles in the Skies	12	1981	Shakespeare, Brahe, England, Vedal, supernovae, Nova, Kepler
Dryer, Ivan	Pouli Holo'Oko'A'Ana' A Ka La	12	1981	eclipse, Sun, Moon, planet, observe, Hawaii
-	Gifts for Griffith	12	1981	GO
	Program Notes to William			
Reaves, Gibson	Herschel's Echo Catch	12	1981	Herschel, music, Echo Catch
Upton, Edward K. L.	The Great Earthquake Hoax	1	1982	The Jupiter Effect, Gribbin, disaster, pseudoscience, astrology, earthquake
Gribbin, John	The Jupiter Effect Revisited	1	1982	The Jupiter Effect, sunspot, earthquake, sun
Krupp, E. C.	Sizing Up the Line-up	1	1982	The Jupiter Effect, earthquake, alignment, Apocalypse
Silbar, Margaret L.	Neutrinos: Rulers of the Universe?	1	1982	Neutrino, Sun, cosmology, Reines, Cowan, physics, observe, Hubble, big bang,
Mims, Sam S.	Blue Stragglers: Binary Systems or Mixed-up Stars?	2	1982	binary, star, blue, straggler, Hertzsprung-Russell, cluster
	Inanna Visits the Land of the Dead: An Astronomical Interpretation	2	1982	myth, phenomena, Mercury, Venus, conjunction, god, Inanna, Land of the Dead

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Steffey, Philip C.	Some Serious Astronomy in the "Sirius Mystery" Part II Spinning Worlds, Spiraling Stars, and Siguis: the Solar System Folklore of the Dogon (Part 1 of 7)	2	1982	Dogon, god, Sigui, Sirius, extraterrestrial, life, alien, myth, religion
Gribbin, John	Base Eight Arithmetic, Meteorites and Us	3	1982	arithmetic, life, alien, intelligence, dinosaur, meteorite
-	Dr. Robert S. Richardson	3	1982	GO, Richardson
Roques, Paul	Some Memories of Bob Richardson	3	1982	GO, Richardson
Steffey, Philip C.	The Serious Astronomy in the "Sirius Mystery" Part II Spinning Worlds, Spiraling Stars and Siguis: the Solar System Folklore of the Dogon (Part 2 of 7)	3	1982	Dogon, god, Sigui, Sirius, Earth, Pillar, myth, religion, Moon, Mars, Milky Way
Keel, William C.	A Lens in the Sky: the Case of the Double Quasar	4	1982	quasar, relativity, Einstein, cosmological constant, Hubble, radio, galaxy
Barker, William A.	Portraits in the Sky: Merlyn and a Quasar (3C273)	4	1982	quasar, Merlyn, magician, King Arthur, galaxy, star
Dreher, Diane E.	Two Noteworthy Dark Sky	4	1982	comet, observe, Grigg- Skjellerup, Churyumov- Gerasimenko
Townsend, Charles L.	Comets for 1982	4	1982	
Steffey, Philip	The Serious Astronomy in the "Serious Mystery" Part II Spinning Worlds, Spiraling Stars, and Siguis: the Solar System Folklore of the Dogon (Part 3 of 7)	4	1982	Dogon, Jupiter, Sigui, Sirius, Earth, myth, religion
Bracher, Katherine	Painted Cave: a Chumash Indian Eclipse Record?	5	1982	Indian, eclipse, Sun, Moon, cave, paint, Chumash, California
Cordell, Bruce M.	Earths: Current Views of How the Rocky Worlds Work	5	1982	plate tectonics, ocean, earthquake, continental, Moon, Mercury, Mars, Venus
Steffey, Philip C.	The Serious Astronomy in the "Sirius Mystery" Part II Spinning Worlds, Spiraling Stars, and Siguis: the Solar System Folklore of the Dogon (Part 4 of 7)	5	1982	Dogon, religion, Sigui,
Winter, Frank H.	Observatories in Space, 1920s Style	6	1982	Sirius, myth, religion, ecliptic, Jupiter, Saturn, Milky Way, galaxy
Krupp, E. C.	The Mandate of Heaven	6	1982	science fiction, observatory, Hale, station, Noordung, Skylab, Hubble Space Telescope
Krupp, E. C.	Sky Riders	6	1982	China, observe, religion, Ming, Beijing, Heaven
Gribbin, John	The Case of the Missing Neutrinos: "Curiouser and Curiouser!"	7	1982	Greece, god, myth, religion, China, Egypt, sky
Krupp, E. C.	Tombs That Touched the China Sky	7	1982	neutrino, Big Bang, Davis, Carroll
Schafer, Edward H.	Astral Energy in Medieval China	7	1982	China, tomb, emperor, religion, myth, Qin Shi Huang Di
				China, Taoist, god, religion, sky

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Winkler, Louis B.	Prescribing by the Stars: Thousands of Years of Celestial Medicine	8	1982	astrology, pseudoscience, myth, doctor, medicine, philosophy
Krupp, E. C.	Shadows Cast for the Son of Heaven	8	1982	Heaven, China, Shadows, myth, stick, Guo Shou jing
	The Serious Astronomy in the "Sirius Mystery" Part II Spinning Worlds, Spiraling Stars, and Siguis: the Solar System Folklore of the Dogon (Part 5 of 7)			Sirius, Dogon, Sigui, religion, ritual, Jupiter, Saturn
-	The 1982 Winners	9	1982	GO
Gribbin, John	The Curious Case of the Shrinking Sun	9	1982	Sun, shrink, Eddy, Greenwich, eclipse, totality, Gilliland
Krupp, E. C.	The Serpent Descending	9	1982	Mexico, Maya, GO, equinox, Castillo, myth, serpent, religion
Irwin, John B.	The Case of the Orange Orb Dark and Enigmatic: The Total Lunar Eclipse of 5-6 July 1982	10	1982	Jupiter, Io, earthquake, Galileo, volcano, magnetic, Voyager
Krupp, E. C.	The Serious Astronomy in the "Sirius Mystery" Part II Spinning Worlds, Spiraling Stars, and Siguis: the Solar System Folklore of the Dogon (Part 6 of 7)	10	1982	GO, Moon, eclipse
Steffey, Philip C.	Astronomical Society of the Pacific Announces 1982 Prizewinners	10	1982	Dogon, religion, Sirius, Siguis, Jupiter, Saturn, conjunction, Kepler
-	The Green Flash	11	1982	GO
Moyer, Gordon				Sun, sunset, green, observe
Barker, William A.	Portraits in the Sky: Baryshnikov and the Crab Pulsar	11	1982	pulsar, Crab, Baryshnikov, dance, Soviet Union
Dreher, Diane E.	The Serious Astronomy in the "Sirius Mystery" Part II Spinning Worlds, Spiraling Stars, and Siguis: the Solar System Folklore of the Dogon (Part 7 of 7)	11	1982	Dogon, Sirius, Siguis, religion, astrophysics, supernovae
-	Shuttling Right Along America's Anticipation of Halley's Two Periodic Comets	11	1982	Shuttle, Columbia, observe, GO
Winkler, Louis B.				comet, Halley, United States, America, observe, colony
Barker, William A.	Portraits in the Sky: Vladimir Lenin and Betelgeuse	12	1982	Soviet Union, Lenin, Betelgeuse, red giant
Dreher, Diane E.	Observing the Sun with San Fernando Observatory's Solar Patrol	12	1982	
Greenberg, Stephen				Sun, flare, observe, patrol, GO
Enever, J. E.	When Explosions Collide	1	1983	supernovae, China, star, Cygnus, debris, collide, Saturn
Krupp, E. C.	Celestial Wardrobe	1	1983	China, costume, wardrobe, Indian, Mesopotamia
Byrd, Deborah				star, evolution, Doppler, blue, Hertzsprung, Russell, diagram
Wheeler, J. Craig	Those Old Straggler Blues	2	1983	
Cook, Anthony	Comet Halley Update	2	1983	comet, Halley, GO

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Reese, Ronald Lane O'Brien, Jack L.	Renaissance Cosmologies in Paradise Lost  Minor Planet 1620 Geographos: Circumstances of Its Passage	2	1983	Paradise Lost, Milton, religion, philosophy, Shakespeare, cosmology
Townsend, Charles	Paul Roques: Forty Years at Griffith Observatory	2	1983	National Geographic, asteroid, Geographos, Apollo, observe
Krupp, E. C.	Daughters of the Sky: A Brief History of Women in Astronomy	2	1983	Roques, GO
Nelson, Debra L.	The Eclipse That Failed Comet Halley And Some Dubious Achievement Awards	3	1983	women, Hypatia, Dume, Howelcke, Herschel, Mitchel, Cannon, Burbidge
Hostetter, H. Clyde Yeomans, Donald K. Krupp, E. C.	As Far As the Eye Can See	3 4 4	1983	eclipse, Moon, Sun, Solar, Babylon, predict comet, Halley, Aristotle, Seneca, Greece, Rome, China, Apian, D'angos Doppler, quasar, PKS, farthest
Barker, William A. Dreher, Diane E.	Portraits in the Sky Joan of Arc and the Ring Nebula Thomas Woods and the Parsonstown Monsters	4	1983	Joan of Arc, Ring Nebula, religion, Church, France, England telescope, Earl of Rosse, Woods, Parsons, Herschel, Parsonstown
Johns, Gerald Barker, William A. Dreher, Diane E.	Portraits in the Sky: Lucifer and the Black Hole Misty, the Meteorite-Menaced Cat	5	1983	Lucifer, black hole, Satan, Devil, religion, Paradise Lost, Dante, Inferno, Cygnus
Mosley, John	The Sunwatchers of Chaco Canyon	5	1983	Misty, Skylab, meteorite, Stevens, cat, Indian, Chaco Canyon, Southwest, sun, Anasazi, observe, Pueblo Bonito
Zeilik, Michael	Light and Shadow Running After Rainbows: Annie Jump Cannon	6	1983	GO, Yosemite, Hovenweep, Anasazi, Newgrange, Ireland, Kogi, Itza
Hedges, Kathleen	Dear Griffith Observatory	7	1983	Delaware, Cannon, women, Harvard, star, classification, Draper, Fleming
Krupp, E. C.	Widening the Eye's Iris	7	1983	GO, letter
Krupp, E. C.	Under China Skies	8	1983	Infrared Astronomy Satellite, IRAS, California, Vandenberg, United Kingdom
-	The Ace Moving Company	8	1983	China, observe, planetarium, People'
-	F Troop Musters Into Space	8	1983	Republic of China, GO, Beijing
-	Venus and Mars Are All Right, Tonight	8	1983	Space Shuttle, Columbia
-	The 1983 Winners	9	1983	Space Shuttle, Challenger
Goldsmith, Donald	Modern Music of the Spheres: The Millisecond Pulsar	9	1983	Mars, Venus, observe, GO
Krupp, E. C.	Discovered by Satellite: Comet IRAS-Araki-Alcock	9	1983	GO
Barker, William A.	Portraits in the Sky: Alexander the Great and the Crab Supernovae	9	1983	Kepler, music, pulsar, Harmonices Mundi, neutron
Dreher, Diane E.	Adriaan van Maanen: How a Good Scientist Went Wrong	10	1983	GO, comet, IRAS-Araki- Alcock, Infrared Astronomical Satellite
Martin, Donald W.	The Burney Balloon or Venus Dances Backwards	10	1983	Crab, Supernovae, Alexander, Nebula, Tycho's, Kepler's, Hellenistic
Olsen, Barbara P.				Maanen, galaxy, Curtis, nebula, Hubble, Hart
				World War, Japan, UFO, pseudoscience, Venus

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Krupp, E. C.	Cultivating the Sky What Better Way to go to Gotha: Lalande, Blanchard & the Balloon	10	1983	Inca, Peru, China, observe, zodiac, mythology, Hopi, Maya, Demeter
Chapin, Seymour	The Great Ramadan Eclipse of 1983	11	1983	Montgolfiere, balloon, Rozier, Arlandes, Lalande, Blanchard, Balloon, France
Krupp, E. C.	Fighting for Time	12	1983	eclipse, Sun, Moon, Solar, Ramadan,
Smith, Horace A.	High Tides and Winter Storms	1	1984	Islam, observe, India, Mahabharata, Bali
Mosley, John	John Lofdahl Retires	1	1984	time, Naval Observatory, railroad, zone
Krupp, E. C.	Eclipsed Images	1	1984	tide, storm, Moon, Earth, gravity
-	The Strange Case of Madame Guzman and the Mars Mystique	2	1984	GO, Lofdahl
Winter, Frank H.	Dr. George O. Abell	2	1984	Sun, eclipse, Moon
Krupp, E. C.	Comet Crommelin Is Coming	2	1984	Mars, Guzman, canal, life, Lowell,
Cook, Anthony	The Delicate Silhouette of Venus	3	1984	Flammarion
Jackson, Francine	Comet Halley Update #2	3	1984	Abell, GO
Cook, Anthony	Sir Francis Drake and Celestial Navigation: Where Was His California Harbor	3	1984	Comet, Crommelin, observe
Bracher, Katherine	The 1983 A.S.P Awards	3	1984	Venus, observe, transit, Sun
-	Matching Microcosm with Macrocosm: The Urge to Order Planets of Other Stars: The First Hint	4	1984	comet, Halley, observe, GO
Herberger, Charles F.	Dollond vs. Hall Through an Achromatic Lens	4	1984	Drake, California, harbor, England, Goleta
Krupp, E. C.	Sally's Ride, the Midnight Special, the Discovery Rollout, and Spacelab-1	5	1984	Astronomical Society of the Pacific,
Reed, George	Shedding Light	6	1984	Suntzeff, Winget, Zel'dovich, award
-	GOES Status New Planetarium Computer	6	1984	brain, order, Boas, Greece, Indian,
Mosley, John	Saves Lecture's Sanity	6	1984	microcosm
Chapin, Seymour L.	P. J. C. Janssen and the Advent of the Spectroscope into Astronomical Prominence	7	1984	planet, T Tauri, Lick, life, star
Schneider, G. R.	Babylon, observe, pseudo, religion, astrology	7	1984	Hall, Dollond, telescope, achromatic,
Eugenia	Under Babylonian Skies	7	1984	Mann, reflector, Newton
Reddy, Francis	Supernovae, star, giant, dwarf, white,	8	1984	shuttle, spacelab, Challenger, Discovery
Krupp, E. C.	Palomar,	8	1984	electron, subatomic, proton, particle,
Fraknoi, Andrew	red, neutron, Becker, Baade	8	1984	Hydrogen, Oxygen, Bowen
-	Hall, GO	9	1984	GOES, Geostationary Operational
	Environmental Satellite			
	planetarium, GO, Arion			
	Janssen, France, photography,			
	spectroscope,			
	spectrum, Sun, eclipse, comet			
	Babylon, observe, pseudo, religion,			
	astrology			
	Supernovae, star, giant, dwarf, white,			
	Palomar,			
	red, neutron, Becker, Baade			
	Hall, GO			
	astrology, pseudo, science, Bennett, Barth			
	GO			

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Piini, Ernest W.	A Giant Astronomical Instrument of Stone: The Ulugh Beg Observatory	9	1984	Islam, religion, Ulugh Beg, Istanbul, Brahe, religion, Soviet Union, Taragay computer, Greece, software, Tellstar II, Planets, Almanac, Star Cataloguer, Moon, star, planets, eclipse, World Map
Mosley, John	The Universe on a Microcomputer	10	1984	Comet, Halley, advertisement, observe, telescope
Cook, Anthony Sanderson, Richard	Comet Halley Update #3	10	1984	Leonids, meteor shower, observe, North America, electricity
Sakurai, Dorna S.	The Night It Rained Fire	11	1984	Greece, Plato, Neanderthal, Indian, Egypt, religion, god, myth
Pesavento, Peter	The Immortal Sun	11	1984	shuttle, Soviet Union, military, Australia, Cosmos 1445, Soyuz
Barker, William A. Dreher, Diane E.	Space Shuttles - CCCP Style Portraits in the sky: General George S. Patton & Halley's Comet	12	1984	Patton, Halley, comet, World War II, Army
Reed, George	- Galileo Galilei - Dialogue on the Great World Scientist, Man & Myth	1	1985	Galileo, Church, Vatican, Pope, Italy, Copernican, myth, legend
Sperling, Norman	Of Pupils and Brightness	1	1985	telescope, refractor, reflector, observe, pupil
Mood, John Mood, Stephanie	El Chichon and the Dark Lunar Eclipses of 1982 or The 2-Meinel Hypothesis Recovered	2	1985	Moon, eclipse, Sun, Solar, Mexico, El Chichon, NOAA, NASA, volcano
Rilke, Rainer Maria	Venus Setting	2	1985	Venus, GO, Germany
Krupp, E. C. McCarthy, Donald W.	Reaching for the Ring	3	1985	GO, Moon, Lunar, eclipse, annular, Mexico, Sun
Zeitner, Mary	Red and White, Black and Brown: Hide-and-Seek with the Four Dwarfs	4	1985	life, intelligence, other planet, dwarf, Jupiter, brown, red, white, black
Powell, Kenneth E.	Rocks from Space	4	1985	planetarium
Barker, William A.	Portraits in the Sky Mohandas K. Gandhi and Jupiter	4	1985	Gandhi, Jupiter, Hindu, satellites
Injejkian, Susan Armine	Happy Birthday, Griffith Observatory: 50 Years of Public Astronomy	5	1985	GO
Krupp, E. C. Injejkian, Susan Armine	Copper Threads Among the Gold	5	1985	GO, renovation
Krupp, E. C.	Music of the Sphere	5	1985	GO, music
Barker, William A.	Stalking the Future	5	1985	GO, future
Klepa, Lilian	Gods and the Sky in Ancient Scandinavia	6	1985	Scandinavia, Odin, Thor, myth, cosmology, Norse, god
Dreher, Diane E.	Portraits in the Sky: Cleopatra and the Planet Venus	6	1985	Egypt, Venus, Cleopatra
Pesavento, Peter Cook, Anthony	The Russians Were Coming Comet Halley Update #4	7	1985	Moon, Apollo, Soviet Union, cold war, United States, Saturn, Korolev telescope, Halley, comet
Lago, Don	The Canals of Lowell	8	1985	Mars, canal, science fiction, Massachusetts

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Marche, Jordan D.	The Beginnings of Korean Astronomy	8	1985	China, Korea, Moon, planet, observe
-	The 1985 Winners	9	1985	GO
Dickinson, Terence	Probing the Galaxies from Mauna Kea	9	1985	Mauna Kea, galaxy, Hawaii, Canada-France- Hawaii Telescope, CFHT, Freeman, Cepheid
Cook, Anthony	Comet Halley: The 1985-86 Apparition, an Outline	9	1985	Halley, observe, GO
Herberger, Charles F.	The Odyssey as a Journey Through Time	10	1985	Greece, ancient, myth, Odyssey, Homer
Becker, Gary A.	Caroline Herschel: The Light in the Shadow	10	1985	Herschel, England, Uranus, Germany
Resse, Ronald				
Lane Williams, C. Reade	An Astronomer's Poet: Alfred, Lord Tennyson	11	1985	Milton, Tennyson, poet, Renaissance
Morton, Bruce Nagy, T. A.	Tennyson's Harold and the Anachronism of Halley's Comet	11	1985	Tennyson, poet, Harold, Halley, comet
Hansen, U. J.	Comet Light, Comet Bright			
Chapin L. Seymour	Which Comet Appears Right Jean-Sylvain Bailly and "Antediluvian" Astronomy	11	1985	comet, apparition, Germany, archaeoastronomy, Stonehenge, England, Bailly, Norse, Antediluvian
Becker, Gary A.	The Christmas Comet of Johann Palitzsch	12	1985	Palitzsch, comet, observe, Christmas, Newton, Halley, Messier, Herschel, Goodricke
Coco, Mark	Photographing Halley's Comet	12	1985	observe, Halley, comet, photography, telescope, film
Edberg, Stephen				
Hadley, Diana	"The Sharply Veering Ways of Comets and of Fame"	1	1986	comet, Halley, England, discovery, Oxford
Cullens, Lynn Tuman, V. S.	Immortality Etched in Stone: Dating Ancient Mesopotamian Stones from Astronomical Symbols	1	1986	ancient, stone, Mesopotamia, god, religion
Goldsmith, Donald	The Shiva Theory or How Life on Earth Was Nearly Destroyed	2	1986	dinosaurs, extinction, life, comet, Nemesis, asteroid, Shiva
McAllister, Susan Injejkian, Susan Armine	Halley's Comet in 1910 and 1986: Of Wonder, Doom, and Business Boom	2	1986	comet, Halley, business, , Comet fever, pseudoscience, doom
Irwin, John B.	Dr. Clarence H. Cleminshaw: A "Tough Act to Follow"	2	1986	Cleminshaw, GO
Nagy, Theresa A.	The Case of the Converging Cluster	3	1986	Cepheids, cluster, galaxy, Centaurus, variable, Venus
Dailey, Sheron J.	The Literary Moons of Uranus	3	1986	Uranus, Moon, Shakespeare, Herschel, A Mid Summer Night's Dream
Cook, Anthony	Closing in on Comet Halley	3	1986	Comet, Halley, Vega, Suisei, Giotto
Pesavento, Peter	Twelfth of April, 1961: A Look Backward	4	1986	Soviet Union, Cosmonaut, Gagarin, Korolyov, Kruschev, Mercury, Vostok
-	Mourning the Astronauts	4	1986	Challenger
-	Knocking on Heaven's Door	4	1986	Uranus, Moon
Mosley, John	Comet Halley: The Best Time to See It	4	1986	Halley, Comet, observe
Krupp, E. C.	Halley's Comet Hits Griffith Observatory	5	1986	Comet, Halley, GO, anniversary, observe

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Fentress, Stephan S.	For Griffith Observatory - in Its Anniversary Year	5	1986	GO Sun, Solar, England, Stonehenge, Swinside, Sighthill, ancient
Lunan, Duncan	Solar Events at Sighthill Sky Brought Down to Earth: California Indian Ground Displays	6	1986	Indian, California, sand painting, Polaris, Pleiades
Apodaca, Paul		6	1986	
Herberger, Charles F.	Mounting to the Moon: 1865 Style	7	1986	Verne, Moon, From the Earth to the Moon and a trip Around it, science fiction, Apollo
	Comet Halley: The View from Pioneer Venus An Unexpected gift from an Old Spacehand			
Berland, Gretchen	Comet Halley: Serendipity on the Desert	7	1986	Venus, Pioneer, Halley, comet
Lesser, Selma	Particle Physics, Cosmology, and the First Hundredth of a Second	7	1986	Halley, comet, observe
Gribbin, John Townsend, Charles	Observational Predictions for the 1987 Return of P/Denning-Fujikawa	8	1986	quantum, physics, Hydrogen, atom, galaxy, quasar, Maxwell
Rogers, John Dearborn, David S. P.	The Death of an Inka	8	1986	
-	The 1986 Winners	9	1986	Inca, ancient, comet, Atahualpa, Capac GO
	In the Shadow of Giants: Forgotten Nineteenth Century American Telescope Makers and Their Crucial Role in Popular Astronomy			
Bell, Trudy E.		9	1986	telescope, United States, Civil War, Clarks
Custer, Clarence P.	New Focus on a Pioneer Astronomer	9	1986	
Birch, Robert W.	The Hugginses, the Drapers, and the Rise of Astrophysics	10	1986	Madeira, amateur, Nevada, California, comet, Tebbutt astrophysics, Kirchhoff, Huggins, Draper, England, spectroscope
Tenn, Joseph S.	Chesley Bonestell 1888-1986	10	1986	Bonestell
Mosley, John	Strange Tales of Time and Space	10	1986	Quasar, Milky Way, Black Hole
Krupp, E. C.	The Case of the Remarkable Rings	10	1986	Rings, Sun, Earth, tree, atmosphere, Douglass
Irwin, John B.		11	1986	Scotland, Sighthill, archaeoastronomy, air, fly, photography
Lunan, Duncan	Archaeoastronomy from the Air	11	1986	Milky Way, cloud, Planet X, Saturn, The Cosmic Serpent, interstellar, Pluto, Neptune
Lunan, Duncan	Shadows on the Milky Way	12	1986	
Orbesen, Tom	Winter Solstice at Salmon Ruin	12	1986	New Mexico, Salmon, Anasazi, Indian WIMPS, weakly interacting massive particles, Sun, solar, neutrinos, galaxy, Big Bang, dark matter
Gilliland, Ronald L.	Missing Mass, WIMPS, and Solar Neutrinos	1	1987	Esarhaddon, Assyrian, Mesopotamia, king, Egypt, Sun, solar
Tuman, V. S.	Astronomical Dating of Esarhaddon's Stela	1	1987	

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Injejkian, Susan Armine	The Universe in Your Mailbox: Observing the Observer's Anniversary	2	1987	GO, 50 Years
Gribbin, John	The Man Who Proved Einstein Was Right	2	1987	Einstein, General Relativity, Eddington
	Supplying Stars by the Pageload: Astronomy Magazines for the Public in			
Pagan, Miriam	1937	2	1987	Popular Astronomy, Griffith Observer, Sky
Burgess, John W.	Julius D. W. Staal	2	1987	Staal, Fernbank Science Center
Herberger, Charles F.	Samson Strides the Skies	3	1987	Bible, god, Samson, Greece, Egypt, Crete
Reese, Ronald Lane Chang, George T.	Once in a Blue Moon	3	1987	moon, blue, full
	Christopher Columbus,			Christopher Columbus,
Kravath, Fred F.	Geodesist	4	1987	San Salvador, new world, navigation
	Mid-day into Black Night: The			eclipse, moon, sun, solar, ancient, Greece,
Bracher, Katherine	Eclipse of Archilochus	4	1987	Archilochus
Krupp, E. C.	Space Stop's Here	5	1987	GO, Space Stop, merchandise
Sanderson, Richard	Frank Korkosz and the First American Planetarium	5	1987	Massachusetts, United States, planetarium, Korkosz
	First Light: An Astronomical Primer for Real Beginners (Part 1 of 3)	5	1987	sky, beginner, observe, constellation interferometer, radio, intercontinental, Young, Very Large Array, Very Long Baseline Array, VLBA, VLA
Keen, Roger	The Case of the Intercontinental Interferometer	6	1987	Greece, myth,
Irwin, John B.	Greeks Bearing Myths: The			Phaenomena, Aratus, Zeus
Williams, Jean	Phaenomena of Aratus	6	1987	
	First Light: An Astronomical Primer for Real Beginners (Part 2 of 3)	6	1987	telescope, sky, beginner
Benson, Arlene	How the Seasons Began: An Ajumawi Narrative Involving Sun, Moon, North Star, and South Star			season, Indian, Ajumawi, Pit River, Sun.
Buckskin, Floyd	Sky Jinks	7	1987	Moon,
-	Have You Seen a Black Hole Lately	7	1987	Moon, Jupiter, Mars, Wilson, GO
Mosley, John	The Second Ringer	8	1987	
Landis, Rob	First Light: An Astronomical Primer for Real Beginners, Focusing on Telescopes (Part 3 of 3)			Black Hole, GO, Cygnus
Keen,Roger	The 1987 Winners	8	1987	Uranus, Saturn, ring, moon, satellite
-	A Most Exceptional Star: The Life of Otto Struve	9	1987	
Sweitzer, James S.				beginner, telescope, Newton, Schmidt-Cassegrain, Dobsonian
Coppola, William C-H	Our Glowing Skies	9	1987	GO
	22 Hours 28 Minutes 4			Otto Struve, Russia, Soviet Union,
	Seconds Moscow Time: Birth of the Space Age	10	1987	Constantinople, GO
Pesavento, Peter				archaeoastronomy, Aztec, zodiac, light
				Sputnik, Soviet Union,
				Cold War, United States, Korolyov,
				Khrushchev

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-	History's Countdown to Sputnik 1: A Timeline of Related Events	10	1987	Cold War, Sputnik, Soviet Union, United States
Tenn, Joseph S.	Simon Newcomb A famous and Forgotten American Astronomer	11	1987	Simon Newcomb, astronomer, Massachusetts, Coast Guard, Brown
Keen, Roger	Take an Option on the Moon (Part 1 of 3)	11	1987	Moon, observe, Mare Imbrium, 2001 Big Dipper, Greece, Navajo, Indian, Egypt.
Krupp, E. C.	The Dipper in Disguise	12	1987	China, Finland Christopher Columbus, Europe, Asia, Ptolemy, Arab, Eratosthenes, Aristotle, Archimedes, Posidonius
Kravath, Fred F.	Sizing Up the Earth Before Columbus Sailed	1	1988	
	Estimates of the Size of the Earth: Third Century B.C. to Fifteenth Century A.D.	1	1988	Earth, size, map, navigation
Ryden, Barbara S.	The Astronomical Odyssey of Monsieur Le Gentil	2	1988	Le Gentil, Paris, France, Cassini, Venus, India
-	The 1987 A.S.P. Awards	2	1988	GO, Astronomical Society of Pacific
-	Meteorites and Mars	3	1988	Mars, Meteorite, Earth, Antarctica
Hostetter, H. Clyde	The Days of the Scorpion	3	1988	A Midsummer Night's Dream, Sumantra, Babylon, Batak
-	The First Stirrings of October	3	1988	GO, earthquake, Whittier-Eisnore
Verschuur, Gerrit L.	Barnard's Dilemma	4	1988	Barnard, belief, Herschel, Ranyard, interstellar material, dust, dark matter
Nagy, T. A.	The First Light Curve for Delta Cephei	4	1988	Delta Cephei, variable, star, Henry Draper, Goodricke
Wynne, D. A.	Nostradamus and the Doom of May	5	1988	Nostradamus, France, astrology, pseudoscience, earthquake
Mosley, John				Astrophysics, Eddington, energy, thermodynamics, gravity, time, universe, Prigogine, Heisenberg
Gribbin, John	Time and the Universe	5	1988	Paris, France, Babylon, Mul-Apin, zodiac, SB#25, Summer solstice
Tuman, V. S.	The Summer Solstice Festival: June 22, 1203 B.C.	5	1988	primordial, Nucleosynthesis, Universe, stellar, General Relativity, time, star, hydrogen, helium, Deuterium, Galaxy
Kawano, Lawrence	Primordial Nucleosynthesis: Gateway to the Early Universe	6	1988	
	Certified Immortality or The World is Waiting for the			pseudo, science, Hoax, star naming, Immortality
Carlton, Lillian E.	Lillianrise	6	1988	
	Making More Out of the Moon (Part 2 of 3)	6	1988	Moon, observe, cycle, period, orbit, Earth Quasar, Kitt Peak, Caltech, Palomar, Schmidt, radio, telescope
Keen, Roger				GO, Billboards
Irwin, John B.	The Case of the Crazy Quasars	7	1988	GO
-	Celestial Billboards	7	1988	
-	An Icon in the Landscape	7	1988	astrology, constellation, Ophiuchus, zodiac, precession, pseudoscience
Mosley, John	Born Under Ophiuchus and Ignored by the Horoscopes: A Modern Dilemma	7	1988	binary, star, globular clusters, x-ray, neutron star, white dwarf
Bailyn, Charles D.	The Amazing Eleven-Minute Binary	8	1988	
	Mars: Riding High in the			Mars, observe, closest approach
Cook, Anthony	Midnight Sky	8	1988	

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Keen, Robert	Catch a Falling Star	8	1988	meteor shower, Perseid, observe
-	On the Firing Line	8	1988	Booster, shuttle, Challenger
-	The 1988 Winners	9	1988	GO
Mackowski, Maura J.	Lifeboat! The Crew Emergency Rescue Vehicle	9	1988	Shuttle, Rescue, vehicle, Moses, Health Maintenance Facility, CERV
Somers, James	How I Wonder Where You Are	9	1988	observe, city, light pollution, telescope
Bridges, Nathan Unruh, W. J.	The Moons of Mars: History, Discovery and Exploration	10	1988	Mars, Moon, Phobos, Hall, Deimos, Mariner, Soviet Union, exploration
Shiloh	Town of Telescopes	10	1988	Santa Clara, telescope, Lick, Hamilton Neptune, Adams, Uranus, Lassell, Challis, Nereid, Harris
Landis, Rob	Planet of the Lost Arc	11	1988	Moon, Greece, Egypt, Indian, Aztec, Television, movie
Krupp, E. C.	Moon Maids	12	1988	
Ponting, Margaret R. Curtis, Ronald G.	Moonwatching at Callanish 1987	12	1988	Moon, observe, Callanish, Scotland, Stonehenge
Byrd, Deborah Krupp, E. C.	The Search for Brown Dwarfs	1	1989	Brown Dwarf, Jupiter, fusion, Hubble Space Telescope
	Brown Dwarf Found	1	1989	Brown dwarf, HD 114762
	Adler Planetarium Director Wins A.S.P. Prize	1	1989	GO
- Wearner, Robert G.	Dr. Catherine Pilachowski: Kitt Peak Astronomer	1	1989	GO
	The Case of the Demon's Diameter	2	1989	galaxy, light, Goodricke, Herschel, Russell, Shapley, Algol
Irwin, John B.	Portraits in the Sky: Helen Keller and Annie Sullivan & Sirius A and Sirius B	2	1989	
Baker, William A. Dreher, Diane E. Chung, Putien Selene	Stars of Shakespeare	2	1989	companion, Pup, Sirius
Rubin, Alan E.	Heat Sources in the Solar System	3	1989	Shakespeare
	Hyderabad's Birla Planetarium Celebrates the Winter Solstice in India with an "International Seminar on Ancient Astronomies"			Heat, Solar System, Sun, fusion, meteor, asteroid, tidal forces, tides, Moon, Jupiter
Krupp, E. C.	Particle Physics and Cosmology: Getting to the "GUTs" of the Matter	3	1989	GO, ancient astronomy, India Grand Unified Theory, particle, physics,
Ayres, Annabel	The Unmythical Puranas: A Study in Reverse Symbolism	4	1989	
Sidharth, B. G.	Mars Invades Griffith Observatory	4	1989	cosmology
Krupp, E. C.	Deep in the Heart of Texas: A Look at the McDonald Observatory	5	1989	Hindu, India, Puranas, Rig Veda Mars, GO, The War of the Worlds, Wells, science fiction, alien
Gonzaga, Shireen P.	A Century of Astronomy Celebrated by the Astronomical Society of the Pacific	5	1989	Texas, McDonald Observatory, telescope, Mt. Locke
-				GO, Astronomical Society of the Pacific

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Harrington, Philip	The Story of Stellafane	6	1989	Vermont, convention, Porter, Scientific America, Stellafane
Whitney, Colleen	Astronomical Accident	6	1989	National Radio
Whitney, Colleen	Milton's Disastrous Eclipse	6	1989	Astronomy Observatory, West Virginia, accident
Loudon, Jim	Twenty Years After: Navigating the Seas of the Moon	7	1989	Religion, English, Milton, eclipse, Bible, Paradise
Tenn, Joseph S.	The Rise and Fall of Astrophotography	8	1989	Apollo, Moon, seas, Saturn, Kennedy
Aldrin, Buzz	We Came in Peace: A Tribute to Apollo 11	8	1989	Astrophotography, plate, telescope, CCD
-	All Trails Head to Griffith Observatory	8	1989	Moon, Apollo, Aldrin
-	The 1989 Winners	9	1989	GO
-	The Case of the Clouded Crystal Ball	9	1989	GO
Irwin, John	Griffith Observatory Parades in Pasadena	9	1989	future, crystal ball, telescope, sky survey, Palomar, brown dwarf
-	Supernovae: Catastrophes in the Sky	9	1989	GO
Van Dyk, Schuyler D.	The Earl and the Leviathan	10	1989	supernovae, Type, Hubble
Ryden, Barbara	Rayed Disks	11	1989	Parsons, Earl, Leviathan, telescope
Krupp, E. C.	Facing the Sun	12	1989	Indians, Egypt, sun, solar, sunburst
Krupp, E. C.	Making Waves with the Lord of the Sea	1	1990	Germany, Sun, Solar, Greece, Indian, Mexico
Krupp, E. C.	The United States Navy Corps of Professors of Mathematics	1	1990	Neptune, Voyager
Peterson, Charles J.	Neptune's Ovals and Torcs	2	1990	Navy, United States, Newcomb, Academy
Wearner, Robert G.	Adventures of a Participant in the 1988 Radio Astronomy Summer Institute	2	1990	Neptune, Voyager, atmosphere, clouds, ring
Wasiluk, Elizabeth S.	More Fish in Neptune's Sea	3	1990	National Radio Astronomy Observatory, West Virginia, Radio Astronomy Summer Institute
Krupp, E. C.	Chinese Astronomers	3	1990	Neptune, Triton, Voyager, moon
Mackowski, Maura J.	Life or Death: Planetary Life	4	1990	China, Han, Shang, Halley
Menke, David H.	Geology's Clues to the Origin of Life	5	1990	life, geology, tectonic, hydrogen, oxygen, Mars, Earth, Moon, Venus
Mosley, John	The Donahue Meteorite	5	1990	Connecticut, Donahue, Meteorite
Keen, Robert	Charting the Heavens	6	1990	star chart, heaven, England, Palomar, Hubble Space Telescope
Peterson, Charles J.	Moonlight and Shadows	6	1990	Moon, eclipse, Sun, Earth, Solar
-	A Very Brief Biography and Popular Account of the Unparalleled T. J. J. See	7	1990	biography, Missouri, Lowell, University of Chicago, Naval Observatory
Mosley, John	Preview of the 11 July 1991 Solar Eclipse	7	1990	Solar, Sun, Eclipse, GO
Winkler, Lewis	Legal Aspects of Astronomy	8	1990	law, legal, Cold War, Soviet Union, United States, Hubble Space Telescope, Viking
Hoag, A.	Aristarchos Revisited	8	1990	Aristarchos, Greece

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-	The 1990 Winners	9	1990	GO
Mackowski, Maura J.	Salad Bars in Space: The Controlled Ecological Life Support System (CELSS)	9	1990	space traveler, life, future, food, Controlled Ecological Life Support System
Krupp, E. C.	The Great Attractor	9	1990	Centaurus, supercluster, Hydra-Centaurus, Great Attractor
Fillmore, Mary				pulsar, supernovae, Backer, Bell, Hewish, rotation
Rankin, Joanna				
Krupp, E. C.	The Quest for Exotic Pulsars	10	1990	
Rhode, Katherine L.	Partial Solar Eclipse Makes it to Class on Time	10	1990	Solar, Sun, eclipse, Moon, GO, partial
	Probing the Unseen Universe with UIT and Astro	11	1990	NASA, Astro, Ultraviolet Imaging Telescope, Shuttle, quasars
Russell, John A.	Time Cycles in Paradise: The Balinese Calendar	12	1990	Bali, Honduras, Venus, Mead
	The Griffith Observer Cumulative Index 1981-1990 Vols. 45-54	12	1990	GO, index
				seven sisters, constellation, Pleiades, Taurus the Bull, China, Japan, Siberia, Mesopotamia, Indians
Krupp, E. C.	Seven Sisters	1	1991	Darwin, relativity, Sun, temperature, geology, Buffon, Helmholtz
Gribbin, John	How Darwin Discovered Relativity	2	1991	
Mosley, John	Earth's Core Revealed in Observatory Basement	2	1991	GO, Bonestell
Herberger, Charles F.	The Labyrinth as an Emblem of the Womb, the Tomb, and Lunisolar Cyclical Time	3	1991	Greece, Sun, Moon, Etruscan
	Lights Out: A Special Observatory Lecture Series on Eclipses of the Sun and Moon	3	1991	GO
Mosley, John	In the Moon's Shadow	4	1991	Sun, eclipse, solar, GO
So, Patrick	Targets of an Eclipse Hunter	4	1991	eclipse, Moon, Sun, GO
Cook, Anthony	How to Watch and Photograph a Solar Eclipse	4	1991	Sun, Moon, filter, telescope, photography, solar, eclipse, GO
Landis, Rob	Jupiter's Ethereal Rings	5	1991	Voyager, Pioneer, satellite, Galileo, Jupiter, rings
	The Central Bureau for Astronomical Telegrams: A Case Study in Astronomical Internationalism	6	1991	communication, comet, asteroid, supernovae, The Atlantic Cable, Commission 6, The Central Bureau for Astronomical Telegrams
Sperling, Norman				
Berube, Conrad A.	The Bee-Riddled Carcass	7	1991	constellation, Greece, Lion, Bull, Taurus
	A Berlin Forest in Griffith Park	7	1991	GO
Miles, Kathy A.	"Not to Have Lived in Vain"	8	1991	Brahe, Vedal
Mood, John Mood, Stephanie	Totalis Eclipsitis	8	1991	Great Tropical Trans- Pacific Eclipse, Sun, Solar, Moon
	The 1991 Winners	9	1991	GO
Allen, David	My Mother Will Never Read This Soviet Cosmonaut	9	1991	Infrared, eyesight, Venus
Mosley, John	Demonstrates Perestroika	9	1991	GO, Grechko, Soviet Union, Russia, Perestroika
Irwin, John B.	The Case of the Annihilating Asteroid	10	1991	comet, Earth, Tunguska, asteroid

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Lankford, John	Funding American Astronomy: An Overview	10	1991	politics, money, funding
Krupp, E. C.	The Great Plumed Tropical Trans-Pacific Eclipse of 1991	11	1991	Sun, Moon, cruise, GO, Solar, eclipse
Mosley, John	The Sun Sets Twice on January 4: Los Angeles's Sunset Solar Eclipse	12	1991	GO, annular, Sun, Eclipse, Moon
So, Patrick	Eclipsed at Sunset	12	1991	GO, annular, Ring of Fire, Sun, Moon, Solar, eclipse
Cook, Anthony	How and Where to Watch The Sunset Solar Eclipse	12	1991	Sun, annular, eclipse, photography, Moon, Solar
Brunello, Christine M.	The War of the Rings	1	1992	Saturn, Galileo, Huygens, Rings
Hollins, J. M.	Wrexie	1	1992	love, Lowell, Leonard, GO
-	Allan Sandage Awarded Crafoord Prize	1	1992	GO
Young, Arthur	The Fallacy of Scale	2	1992	Einstein, quantum mechanic, Grand Unified Theory, Big Bang, scale
Elson, Rebecca A. W.	The Clouds of Magellan: Our Neighbors in Space	2	1992	Magellan, galaxy, Columbus, clouds
Witt-Miller, Harriet	What the Spider Knows: A New Look at an Old Astronomy	3	1992	fractal, Copernicus, cosmology, Polynesia
Dryer, Ivan	Paradise Lost: Eclipsed in Hawaii	3	1992	Hawaii, viewing, Sun, solar, Moon, eclipse dark matter, Einstein, quantum mechanics, photon, black hole, dwarf, neutron, wormhole
Davies, Paul Gribbin, John	Weighing Up Empty Space	4	1992	Quantum physicists, quantum mechanics, Einstein, conspiracy, Bohm, theory
	The Quantum Conspiracy: How The Quantum Physicists Hijacked Reality When Nobody Was Looking	4	1992	Pluto, Planet X, Herschel, Charon, Hubble Space Telescope, spacecraft
Landis, Rob	Pluto: Past, Present, and Future	5	1992	
Krupp, E. C.	Annulled by Clouds	6	1992	GO, Sun, solar, eclipse, Moon, Ring of Fire
Irwin, John B.	The Case of the Southern Skies	7	1992	Chile, Milky Way, Magellan, photoelectric, Radcliffe, South Africa
Clocchiatti, Alejandro	The Mysterious Darkness of Night: The Story of Olbers's Paradox	8	1992	Greece, Olbers, Halley, Einstein, Hubble, Big Bang, dark matter
Bertsch, Hans Pinto, Fabrizio	The Eclipse and the Pueblo Giant's Talk	8	1992	Indian, Native American, Mexico, cruise, Sun, Moon, Solar
	Back to Berlin from Griffith Observatory	9	1992	Kepler, Galileo, planetary motion
-	The 1992 Winners	9	1992	GO
Peterson, Carolyn Collins	Magellan at Venus	10	1992	GO
	Check it Out! Who Was Astronomy's Most Influential Astronomer	10	1992	NASA, radar, Mariner, Pioneer, Venus, Magellan
Reed, George	Totality at Dawn: The Uruguayan Solar Eclipse on 30	11	1992	Delphic Oracle, Copernicus, Newton, Galileo, Hipparchus, Brahe, Halley
Harris, Joel K.		11	1992	Sun, Moon, Uruguay, viewing, eclipse, Solar

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Krupp, E. C.	June 1992 Dark Bunting for the Moon on Flag Day	11	1992	GO, eclipse, Moon Venus, Greece, Egypt, Mesopotamia, Hittite, Indian
Krupp, E. C.	Phases of Venus Science, Religion, and Island Universes: The Views of Heber Doust Curtis	12	1992	
Carolin, Miriam	A Brief History of the Planetary Telescope: Early Refractors (Part 1 of 3)	1	1993	infinite, multiple universes, Religion, island universe, Curtis
Hockey, Thomas A.	Stardust Memories	1	1993	history, Kepler, telescope, refractor supernovae
Hockey, Thomas A.	Brief History of Planetary Telescope: Reflectors and Achromatics (Part 2 of 3)	2	1993	history, Newton, Herschel, telescope, reflector, achromatics Serendipity, luck, chance, history, Newton, Galileo, Herschel, Jansky, Bell
Wearner, Robert G.	Astronomy and Serendipity	3	1993	
Hockey, Thomas A.	A Brief History of the Planetary Telescope: The Nineteenth Century (Part 3 of 3)	3	1993	history, telescope, nineteenth century
Reed, George	We have met the Aliens and...	4	1993	life, science fiction, 2001, Star Wars, Alien, E. T., aliens aliens, habitable planet, intelligence, life, zone
Young, Arthur Merlin, Peter W.	You Light Up My Life Zone Return to the Red Planet	5	1993	Mars Observer,
Thurston, Hugh Worthen, Thomas D.	The Length of the Year	6	1993	spacecraft ancient China, Greece, Chinese
Winter, Frank H.	Eclipse by Semester First Armada to Halley	6	1993	sun, solar, moon, eclipse
		7	1993	balloon, history, comet, Halley
Meluzin, Sylvia Jayawardhana, Ray	The Chamber of the Zenith Sun	7	1993	Honduras, Mexico, Zapotec, Monte Alban
Krupp, E. C.	The Quest for a Boring Universe Emerging at Sundown	8	1993	Big Bang, galaxy, Great Wall, Dark Matter
		8	1993	Moon, eclipse, GO, Sundown radio telescope,
Allen, David -	The Dark Tower The 1993 Winners	9	1993	Australia, galaxy, PTI, IRAS, galaxy
		10	1993	GO Apollo, Cold War, Soviet
Landis, Rob	A Shadowy Trace of the Space Race	10	1993	Union, N1, Moon, United States, Russia, Space Race
Rust, David M.	Solar Storms and Manned Exploration of Deep Space	11	1993	Solar storms, manned exploration, solar flare, sun, proton storm, magnetic field
Russell, John A.	Christopher Columbus: Insight Versus Eyesight	11	1993	Columbus, Navigation, Polaris
Krupp, E. C.	Spilled Milk	12	1993	Milky Way, Greece, Herschel, Galileo, Wright, Aztec, Chinese
Gribbin, John	The Man Who Invented Black Holes	1	1994	Newton, Cassini, Jupiter, pulsar, Michell, Laplace, Black Hole

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Merlin, Peter W.	Atlas Boosts Environmental Satellite into Orbit: Contact with Spacecraft Lost After Two Weeks	1	1994	Atlas, NOAA-13, Atlas, Cold War, Environment
Benensohn, Jeffrey S.	The First Telescopes and Their Impact	2	1994	Telescope, history, Lippershey, Galileo, Huygens, Cassini, Newton, Bradley, Hadley
Keen, Roger	A Sirius Problem	2	1994	supernovae, Sirius, astrophysics, white dwarfs, black hole
Goldsmith, Donald	When Asteroids Strike the Earth	3	1994	Yucatan, dinosaurs, extinct, comet, meteoroid, Oort Cloud, Swift-Tuttle, NASA, asteroid
Merlin, Peter W.	Landsat 6: Lost in Space	3	1994	Titan, NOAA, NORAD, Landsat 6, NASA
Krupp, E. C.	The Partial Sunrise of 21 May 1993	3	1994	eclipse, Sun, Moon, Solar, Sunrise, GO
Witt-Miller, Harriet	Searching for New Centers: The Legacy of Copernicus	4	1994	chaos, quantum physics, fractal, Big Bang, Jung, archetype, Copernicus
-	Dark Matter Attracts National Medal of Science	4	1994	GO
Krupp, E. C.	George Lovi: 1939-1993	4	1994	GO
Cook, Anthony	The Secret History of Griffith Observatory: A Belated Acknowledgment	5	1994	GO, Porter
Allen, David	Organically Grown Mayor of Los Angeles Inspects His Cosmic Jurisdiction	6	1994	comet, Halley's Comet, dust, life, organic, pseudoscience
-	Sail on Silver Moon	6	1994	GO
Krupp, E. C.	Countdown to Impact	7	1994	Apollo 11, Armstrong, Aldrin, Moon
Cook, Anthony	Billboards by Moonlight	7	1994	comet Shoemaker-Levi 9, Jupiter
McLean, Ian S.	New Infrared Images Probe Universe	8	1994	GO
Mosley, John	New California Meteorite Finds a Home at Griffith Observatory	8	1994	Hubble Space
Krupp, E. C.	Twinkies, Cream-filled Cupcakes, and the Cosmos: Clifford W. Holmes 1929- 1993	8	1994	Telescope, redshift, Infrared, galaxy, Big Bang, size
McCann, Guy W.	Sir John Herschel and the Birth of Celestial Photography	9	1994	GO, meteorite, exhibit
Merlin, Peter W.	Mobilizing for an International Station in Space	9	1994	GO
-	The 1994 Winners	10	1994	cartography, nebulae, Herschel, photography
Pesavento, Peter	Korolev: The Hidden Years	10	1994	Soviet Union, United States, Cold War, Space Station, International
Hollis, J. M.	If It's Broke, Don't Fix It	10	1994	GO
				Soviet Union, Sputnik, spacecraft design, Korolev
				Hubble Space Telescope, astrophysics, NASA, space shuttle

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Cook, Anthony Schaefer, Bradley E.	Six Decades with Six Astronomers on the Lawn of Griffith Observatory	11	1994	GO, exhibit
Mosley, John	The Hobbit and Durin's Day Meteorites Linked to Asteroid Vesta	11	1994	Tolken, Foster, science fiction, Hobbit, Durin's Day
Krupp, E. C.	Cosmos on Parade: A Year, More-or-less, of Sky Jinks and Earth Tremors: Eclipses and Earthquakes (Part 1 of 2)	12	1994	GO, earthquake, Sun, eclipse, Moon, Solar, Northridge
-	John Mosley Saluted for Service	12	1994	GO
Krupp, E. C.	Cosmos on Parade: A year, More or less, of Sky Jinks and Earth Tremors (Part 2 of 2)	1	1995	Comet Shoemaker-Levi, pseudoscience, earthquake, Northridge
Colwell, Joshua E.	Catastrophes in the Outer Solar System: The Forge of New Moons and Rings	2	1995	comet, moons, rings, outer solar system, Neptune, Saturn, Uranus
Penn, Mathew J. Gribbin, John	Probing the Depths of Sunspots	3	1995	sunspot, sun, observe
	Puzzling Pulsars	3	1995	radio, pulsar
Green, Paul J. Fentress, Stephen S.	Dilemma of the Devious Dwarfs	4	1995	dark matter, binary, dwarf
	Scenes from the Life Of A Great Picture	4	1995	Earth, culture, photo
Eberts, Mike	The Little-Known Early History of the Griffith Observatory	5	1995	GO
Ryan, Sean G. Osterbrock, Donald E.	Lightweight Atoms Prompt Heavyweight Response	6	1995	star birth, supernovae, metal, atoms, lightweight
Wheeler, John Craig	The Two Stellar Populations	6	1995	Walter Baade, star birth, star population
McNierney, Michael	Black Hole X-Ray Novae: A New View into the Abyss	7	1995	gamma rays, supernovae, Black Hole, X-Ray
Steele, Suzanne	Refuting Roman Astrology	7	1995	pseudoscience, zodiac, astrology, Rome
	Lost in Cyberspace: Astronomy and the Internet	8	1995	World Wide Web, resource, Cyberspace, Internet
-	FOTO Travels the Globe for Astronomy	8	1995	GO
	Breathless: The South American High Altitude			
Krupp, E. C.	Toothbrush; Total Solar Eclipse of 3 November 1994	9	1995	Chile, sun, solar, eclipse, Moon
-	The 1995 Winners	10	1995	GO
Gribbin, John	Inflation for Beginners	10	1995	Big Bang, quantum mechanics, grand unified theory, inflation
Johnson, K. Terrell	Gamma-ray Bursts: Act Locally, Originate Globally	11	1995	pulsar, neutron star, gamma-ray
Sidharth, B. G.	Brahma's Day: The Great Cosmic Cycle and the Age of the Rig Veda	11	1995	Hindu, Puranas, zodiac, astrology, Brahma's Day
Grice, Noreen	Musica Mundana: The Heavenly Harmony	12	1995	Greece, Rome, history, music

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Bertsch, Hans	Converging Rings: The Path to Annular Eclipse at Cahokia's Woodhenge	12	1995	Native American, Illini, prehistory, rings, eclipse, solar, sun, Moon, Woodhenge
Colwell, Joshua E.	Whatever Happened to the Tenth Planet?	1	1996	asteroid belt, Kuiper
Leseman, Curtis	Partially Eclipsed: A Personal Journal to Catch the Sun	1	1996	Belt, extra solar planet, planet, Planet X
-	Seventy-Five Years of Avoidance of Evil in the Department of Recreation and Parks	1	1996	Puerto Rico, computer, eclipse, Sun, Moon, Solar
-	New FOTO Board Assembles for Griffith Observatory	1	1996	GO
Goldsmith, Donald	How old is the Universe?	2	1996	Hubble Constant, Virgo Cluster
Krupp, E. C.	Grace Under Pressure: The Diamond of the Skies	2	1996	GO, Anniversary
Green, Matthew	The Sacred Sky of the Navajo and Pueblo	3	1996	Indian, calendar, belief, Navajo, Pueblo
Krupp, E. C.	Missing Bob	3	1996	Robert J. Chambers
-	Rescued at Sea: The Deepavali Triumph-of-Light-over-Darkness; Total Solar Eclipse of 1995	4	1996	cruise, South China Sea, Cambodia, Thailand, eclipse, solar, Sun Galileo, Roemer, Bradley, Foucault, Henderson, Herschel
Reed, George	"Eppur Si Muove"-by Blind faith	5	1996	GO
-	FOTO on the Trail of Ancient Maya Astronomy	5	1996	
Deneroff, Vickie	The Odyssey of Ulysses in the Solar Sea	6	1996	NASA, Jupiter, Sun, Solar, Ulysses
Krupp, E. C.	Hi-Yo, Hyakutake	6	1996	Comet Hyakutake, GO
Miles, Kathy A.	Seeing Further: The Legacy of Robert Hooke	7	1996	England, Newton, Hooke
Hiscock, Philip	The True Blue Moon	7	1996	folklore, Moon
-	If He Had Lived: The Promising but Brief Career of Jeremiah Horrox	8	1996	
Jackson, Francine	Horrox	8	1996	England, Horrox
Krupp, E. C.	A Cosmos in the Grains of Sand	8	1996	Gyuoto Tantric University, monk, cosmos, GO
-	Space Ghost Haunts Griffith Observatory	8	1996	GO
-	Collisions, Cannibals, Starbursts, & Black Holes:			
Peterson, Carolyn Collins	(What's Going on in the Galaxies?)	9	1996	Hubble Space Telescope, starbursts, black holes, supernovae
Reed, George	Final Resting Places	10	1996	Copernicus, Tycho, Kepler, Galileo, Newton, Halley, Herschel, Lick, Lowell, Brashear, bury
Melbourne, Jason	Cosmology: Storytelling on the Grand Scale	11	1996	Religion, Galileo, cosmology, Einstein, Big Bang,
-	G. Bruce Blair Medal Awarded to Griffith Observatory Director	11	1996	GO, Krupp
-	The Top of the Sky, the Center of the World, and the Road Between	12	1996	North Star, Polaris, China, Hindu, Egypt, Aztec, Indian, Judaism

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Krupp, E. C.	Climbing the Cosmic Axis	1	1997	North Star, Polaris, Indian, Aztec, Hittite Kepler, Venus, Mercury, Sun, Gassendi, Halley, Maximilian Hell, Newcomb, transit
Jackson, Francine	In Transit Converging Trajectories: Black Holes, Quasars, and Where	1	1997	
Grice, Noreen A.	They Meet William J. Kaufmann, III: 1942-1994	2	1997	supernovae, black hole, quasars
Krupp, E. C.	Did Halley Slay the Calamitous Comet Dragon?: Ideas about Close-approaching Comets from Whiston to Lalande	2	1997	GO
Chapin, Seymour L.	Hailing A Hale and Hearty Hale-Bopp	3	1997	Jupiter, Venus, Dionis, Halley, Whiston, Lalande, comet Hyakutake, Kohoutek,
Cook, Anthony Woldenberg, Susan	Dr. William Valentine and the Transit of Venus	3	1997	photography, Comet Hale-Bopp Navy, Army, Campbell Town, Venus, Valentine
Leseman, Curtis -	STS-34: Character Building and the Shuttle Diplomat	4	1997	Galileo, NASA, Space Shuttle, STS-34
	FOTO Gives Constantinople	4	1997	GO
Pinto, Fabrizio -	"I Am the Prince of Eternity" The 1997 Boeing Winners	5	1997	Egypt, Copernicus, Kepler, Plato, hieroglyphic
Christianson, Gale E.	The Night the Universe Changed Forever	6	1997	GO
Sandage, Allan R. —	More Fine Detail from Mount Wilson Friends of the Observatory Close in on Winter	6	1997	History, cosmology, Hubble, galaxy telescope, interferometer
Rubin, Alan	Paucity of Aliens	7	1997	GO
	Turkish Delight: The Partial Solar Eclipse of 12 October			pseudoscience, Drake, abduction, Mars, Venus, Jupiter, bacteria, Aliens
Poitevin, Patrick -	1996	7	1997	Turkey, Sun, Moon, Solar, Eclipse
	Putting Griffith into the Park	7	1997	GO
	Astronomy in the Twenty-first Century: The Development of			telescope, Palomar, 21, twenty-first
Mclean, Ian S.	Very Large Telescopes	8	1997	century, Keck, reflecting
Krupp, E. C.	The Eclipsed Moon Plays the Same Old Tune	8	1997	GO, eclipse, Moon, Hale- Bopp virus, intelligence, alien, computer, extraterrestrial, contact, movie, media, Roswell, machine, 2001
Reed, George	Viral Symbiosis: A No-Brainer	9	1997	Lascaux, Taurus, cave, bull, France, constellation, Pleiades
Edge, Frank	Taurus in Lascaux	9	1997	
Cook, Anthony	High Performance from Hale-Bopp	10	1997	Pyramid Lake, observe, telescope, amateur, Hubble Space Telescope, image Hale-Bopp, GO, observe, telescope, amateur,
Krupp, E. C.	Over the Top with Hale-Bopp Snowblind: The Long Underwear Altaic Total Solar	10	1997	Heaven's Gate, Bell, media
Krupp, E. C.	Eclipse of 9 March 1997	11	1997	Mongolia, eclipse, solar, total, China, observe

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Tidey, Steve	Red Skies at Night	12	1997	asteroid, Earth, impact, Mexico, dinosaur, effect
-	Index to Volume 61, 1997	12	1997	GO, index
Rall, Gloria D.	In Her Brother's Shadow: The Story of Caroline Herschel	1	1998	woman, science, Prussia, biography, war, Herschel, Caroline Hubble Space Telescope, Pathfinder, Mars, Surveyor, photo neutrino, detect, Hercules, 1987A, supernova, nucleosynthesis, WIMP, Sudbery, observatory
Krupp, E. C.	Mobile on Mars	1	1998	Halley, comet, GO media, products, influence, market, candy, Mars, comet, advertise GO, FOTO, photo
Shire, Philip R.	Unveiling Neutrino Astronomy	2	1998	comet, asteroid, collision, interstellar, dust, Poynting- Robertson, Cosmic Background Explorer, Saturn, ring, Jupiter, halo Near earth asteroid rendezvous, observe, GO
-	A Comet in the Stream	2	1998	GO, FOTO, photo
Grice, Noreen	A Shopper's Guide to Astronomy	3	1998	dust, comet, asteroid, belt, particles, solar system, Saturn, ring, orbit, Jupiter, halo, Tutu
-	FOTO Goes National	3	1998	Near earth asteroid rendezvous, observe, G FOTO, GO
Colwell, Joshua E.	Much Ado About Next to Nothing	4	1998	Halley, transit, Mercury, Venus, sun, Hell, Jesuit, Vienna Observatory, Proctor, Newcomb, Sarton
-	A Nod as Good as a Wink	4	1998	GO, Boeing
-	FOTO By the Bay	4	1998	Milky Way, diameter, Kapteyn, Oort, hydrogen, dark matter, ionized, Sunyaev, cold, outer, sun
Cowell, Joshua E.	Much Ado About Next to Nothing	4	1998	X-ray, Roentgen, Crookes, tube, glow, atmosphere, emission, Scorpius, HEAO, High
-	A Nod as Good as a Wink	4	1998	Energy Astrophysics Observatories, satellite, telescope, AXAF, Advanced X-ray Astrophysics Facility
-	FOTO By The Bay	4	1998	comet, FOTO, Halley, Giacobini-Zinner, Stardust spacecraft, Wild-2
Jackson, Francine	The Trials of Hell or How a Jesuit Priest Regained his Reputation	5	1998	Mars, War of the Worlds, Mars Attacks, Low FOTO, SOHO
-	The 1998 Boeing Winners	6	1998	spacecraft, Voyager, earthquake total solar eclipse, February 26, 1998, Caribbean
Lazio, T. Joseph W.	How Big is the Milky Way?	6	1998	FOTO anniversary Captain James Cook, H.M. Bark Endeavour, Transit of Venus, Hawaii, New Zealand
Grice, Noreen	X-Rays: From Earth to Orbit	7	1998	
Knack, Kara	Star Dust	7	1998	
Rubin, Alan E.	The Search for Life on Mars: Oasis or Mirage	8	1998	
Knack, Kara	World-class Vulgarity	8	1998	
Krupp, E.C.	Pirating the Sun	9	1998	
Knack, Kara	Twenty Years After	9	1998	
Jackson, Francine	The Voyage of the Endeavour... the First One	10	1998	

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Liritzis, Ioannis	Bronze Age Greek Pyramids and Orion's Belt	10	1998	Hellenikon pyramids, Athens, Greece, archaeoastronomy
Krupp, E.C.	Bian Depei and Li Yuan Acquire Celestial Status	10	1998	asteroid, minor planet (6742) Biandepei = 1994 GR
Knack, Kara	Scaling the Heights for Balance	10	1998	zodiac, autumnal equinox, Libra the scales
Tidey, Steve	The Sun—a Life	11	1998	Milky Way, sun, sunspots, prominence, white dwarf, protoplanetary nebula, SOHO spacecraft
Knack, Kara	Caught in the Storm Tani Jinzan and a Leonid Conflagration: A Two-fold Tragedy of Observation and "Theory" in Edo-era Japan	11	1998	Leonids, meteor shower, comet Tempel-Tuttle
Renshaw, Steven and Ihara, Saori	Beyond the Sky: That Which Others Saw from Afar Curious Writings: Palimpsests on Callisto and Ganymede	12	1998	Japan, Leonids, meteor shower space exploration, human spaceflight, Mercury, Vostok, Gemini, Apollo, Space Shuttle, Mars Pathfinder
Luna, Michael	Early Chicago Astronomy 1862-1895	1	1999	Jupiter, Galilean satellites, Ganymede, Europa, Callisto, Io, Voyager Alvan Clark, Sherburne W. Burnham, George Washington Hough, Dearborn Observatory, Yerkes Observatory Planetarium show, script, constellations, Big Dipper, Perseus & Andromeda, southern sky, Zodiac, Myths Bowls Book reviews,
Lehrer, Eli	Star Tales	2	1999	*"Seismosaurus-The Earth Shaker"-David Gillette
Krupp, E.C.	New Books	3	1999	*"Star-Hopping for Backyard Astronomers"- Alan M. MacRobert
				*"Chasing the Shadow- Joel Harris and Richard Talcott
				*"Star-Hopping: Your Visa to Viewing the Universe" - Robert Garfinkle
				*"Binary Stars: A Pictorial Atlas"- Dirk Terrell
				*"Extraterrestrials- A Field for Earthlings"- Terence Dickinson
Knack, Kara	Visions of Venus	3	1999	Pythagoras, Sumerians, Galileo, Venus Archaeoastronomy, Quincunx, solar symbol, Ancient Mayan, Olmec, Central America, Mexico, Greek, Ireland, and London
Herberger, Charles F.	Diagonal and Framed. Part 1	4	1999	Book reviews,
Krupp, E.C.	New Books	4	1999	*The Astronomer's Sourcebook: The Complete Guide to Astronomical Equipment-Bob Gibson
				*Astronomy Through Space and Time-Sune Engelbrekson

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				*A Practical Guide To CCD Astronomy- Patrick Martinez and Alain Klotz
				*Beginner's Guide to Amature Astronomy- David J. Eicher
				*The Hubble Wars- Eric Chaisson *The Perfect Machine: Building the Palomar Telescope- Ronald Florence
Knack, Kara Herberger, Charles F.	Spring Thing	4	1999	Daylight Saving Time, FOTO
Simbeck, Rob	Diagonal and Framed. Part 2 A Little Group of People	5	1999	Archaeoastronomy, Quincunx, solar, symbol
		5	1999	Comet Hale-Bopp
Knack, Kara Krupp, E.C.	Monumental Astronomers The 1999 Boeing Winners	5	1999	Astronomers monument, Griffith Observatory
		6	1999	Boeing writing contest
Gaidos, Eric J.	Seeing a Biological Universe	6	1999	Astrobiology, life on earth, Mars, Mars meteorite, extraterrestrial life, other planets
Krupp, E.C.	Tag Team	6	1999	Jupiter & Venus conjunction, February 23, 1999
Knack, Kara	Moon Bound	6	1999	Moon, lunar exploration, Apollo
Mosley, John	We Came in Peace	7	1999	Apollo 11, Buzz Aldrin, Planetarium show, script
Knack, Kara	Information Please	7	1999	Books, information technology, Griffith Observatory renovation
Melbourne, Jason Piini, Ernest W.	Gravity: from Aristotle to Einstein-the History of a Theory Outback Annularity	8	1999	Tycho Brahe, Galileo, Kepler, Copernicus, Newton, Maxwell, Einstein
		8	1999	Eclipse, Australia, southern sky
Knack, Kara	Something to Write Home About	8	1999	Eclipse, scale of the Universe
Monda, Richard	Chasing the Moon's Shadow: a			Solar eclipse, annular, total, partial,
Knack, Kara	Totally Awesome Experience	9	1999	February
Renshaw, Steven	See Sun Spot	9	1999	Sunspot cycle
& Ihara, Saori	Stars That Pass in the Night	10	1999	Japanese star lore,
Knack, Kara	Unmasking the Universe	10	1999	Hubble Space Telescope, Physics
Witten, Alan J. Olson, Donald W. & Doesscher, Russell L.	The International Space Station: From Dreams to Reality	11	1999	<i>International Space Station, Salyut 7, "Skylab, Mir, N.A.S.A., European Space" Agency, Unity, Zarya, Zvezda</i>
Cook, Anthony Knack, Kara	California Surprise	11	1999	1833 Leonid Meteor Storm, Captain Joseph R. Walker
	Rapid Transit	11	1999	Transit of Mercury, November 15, 1999,
	Star Potential	11	1999	Venus, Observing a transit
Knack, Kara	Urania's Sheet Music	12	1999	Stars, Milky Way, life cycle of stars
Knack, Kara	The Music of the Night	12	1999	Sheet Music Covers with astronomical themes
--	Index to Volume 63, 1999	12	1999	The Millennium, Griffith Observatory Index 1999

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Rubin, Dr Alan E.	The Human Response to First Contact	1	2000	The Day the Earth Stood Still, Project Ozma, Frank Drake, Arecibo, Radio telescope, SETI, M13, Tau Ceti, Jocelyn Bell, Pioneer 10 and 11, Voyager, Very Large Array, Aliens
Knack, Kara	Eyeless and Upward	1	2000	Museum of Cycladic Art
Reed, Dr. George	Parallel Lives Diverging: Robert Burnham & William Herschel	2	2000	Life and times of Robert Burnham and William Herschel, Burnham's Celestial Handbook
Krupp, Dr. E.C.	Public Transit	2	2000	Mercury transit, November 15, 1999, from Griffith Observatory
Knack, Kara	It's for You	2	2000	Telephones, satellites, internet
Krupp, E.C.	Fleecing the Sun: The European Grand Tour and Quest for the Coronal Fleece	3	2000	Total Solar Eclipse of 11 August 1999
Shannon Baker, Alexi	Astrobiology: The Comprehensive Science	4	2000	NASA, New solar systems, extraterrestrial life, Mars, Stardust
Krupp , E.C.	Cliffhanger	4	2000	FOTO. John Ferraro, Lunar Eclipse January 2000
Knack, Kara	Looking for What We Cannot See	4	2000	Colonel Griffith J. Griffith, 12-inch Zeiss, FOTO
Jackson, Francine	Another Brief History of Time	5	2000	Clocks, Sundials, Nocturnal, water clock, Standard Time
Bajnoczky, Zoltan ; Bobies, Beas; Kovacs, Balint; and Natran, Istvan	Eclipse in Hungary	5	2000	Solar eclipse August 11,1999
Knack, Kara	Rainbow Gazing	5	2000	Rainbows
Luna, Michael	Just Passing By: Near-object Encounters	6	2000	Meteors, asteroids, comets, impact craters, Chicxulub
Krupp, E.C.	The Sky Winked, Ben Mayer, 1925-1999	6	2000	Nova Cygni 1975, Mercury, Astronomical Society of the Pacific, Sky & Telescope
Knack, Kara	Mellow Moon	6	2000	Moon month names
Krupp, E.C.	The 2000 Boeing Winners	7	2000	Essay Contest
McNamara, Bernard	The Mercury 13 and the Selection of Woman Astronauts	7	2000	Mercury space program, Valentina Tereshkova, Jerri Cobb, Jane Hart, Jacqueline Cochran, George Low, John Glenn, Malcolm Scott
Knack, Kara	Flash!	7	2000	Lightning, thunderstorms, Thor
Graham, Alister	The Ultimate Free Ride	8	2000	Galaxies, Edwin Hubble, Hubble Space Telescope, the Big Crunch, the Big Bang, Cosmology, Universe, Supernova
Rao, Joe	Well, I Did Promise Them a Big \$	8	2000	Leonid meteor shower
Knack, Kara	Scaling, Scaling	8	2000	Solar System scale
Conselice, Christopher J.	In Search of the Solar Corona	9	2000	Corona, solar eclipse, Bailey's Beads, Hale, Lyot
Knack, Kara	Checking References	9	2000	Accuracy of astronomical information
Winter, Frank H.	Goddard's Meteor Mania	10	2000	Robert H. Goddard, Rockets, meteor shower, meteoroid hazards to spacecraft, Perseid meteors
Rao, Joe	The Storm at the End of the Century	11	2000	1999 Leonid meteors
Upton, Edward K.L.	The Leonids were Dead, They Said	11	2000	Leonid meteor storms

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Knack, Kara	Thanks for Giving	11	2000	An account of the August 11, 1999 solar eclipse from Romania
Manning, James G.	Voyage to the Secret Sun	12	2000	Archaeoastronomy, the sun, Greek mythology, solar eclipse, corona
Lazio, Joseph	What Lurks in the Heart of the Milky Way	1	2001	Milky Way, galaxy, globular cluster, Kapetyn Universe, stars, Sagittarius
Palmer, Kirk	Twenty Years After	1	2001	Gordon Mitchell. Paul Roques, Anthony Cook. Telescope demonstrator, Astronomical Observer
Knack, Kara	Unveiling Venus	1	2001	Venus, Aphrodite, Mesoamerica
Baker, Alexi Shannon	A Microscope on the Macrocosm	2	2001	Microorganisms, nanobacteria, ALH 84001, Mars meteorite, Scanning Electron Microscope
Olivarez, Jose	Astronomy for Parrots	2	2001	Parrot, Chabot Observatory and Science Center, planetarium
Knack, Kara	One Worth Looking Up To	2	2001	Benjamin Banneker, stellar transit, almanac
				Expanding universe, Einstein, cosmology, Edwin
Goldsmith, Donald	The Runaway Universe	3	2001	Hubble, cosmological constant, supernova, Kerrigan Problem
Naik, Atul P.	The Mother's Lunar Brother	3	2001	Moon lore, Shiva, Chanda Mama, India
Knack, Kara	Instruments of Great Thought	3	2001	William and Caroline Herschel, Uranus, Astronomers Monument
Jackson, Francine	The Human Side of Halley's Comet	4	2001	Comet, transit of Venus, Edmond Halley, 1910, 1986, 2060
Knack, Kara	Far From Home, but not in the Neighborhood	4	2001	Ferdinand Magellan, European exploration, Magellanic clouds
Thurston, Hugh	Maya Eclipse Anticipation	5	2001	Mayan calendar and cycles, Dresden Codex, Sacred Round
Knack, Kara	What a Spectacle	5	2001	Telescope, microscope, Galileo Benjamin Franklin
Bell, Trudy E.	The Eclipse Chasers	6	2001	Total solar eclipse, World Wide Web, eclipse expeditions, photography
Kara, Knack	Moonblind	6	2001	Apollo astronauts, moon landing, Aristarchus, Hipparchus
Bell, Trudy E.	Have Telescope, Will Travel: The Origin of U.S. "Graze-chasing" Expeditions	7	2001	Lunar grazing occultations expeditions, moon, stars, Aldebaran, Riverside Astronomical Society, U.S. Naval Observatory, David W. Dunham
Knack, Kara	Get into the Light	7	2001	Ozone layer, suntan, ultraviolet light, sun, vitamin D, eyes
Bordeleau, André G.	Ferdinand Magellan and his Clouds	8	2001	Magellanic clouds, southern hemisphere, navigation, Spain
Knack, Kara	The Upside of Down Under Enlarged by Perception: The Moon Illusion and the Shape of the Sky	8	2001	Gravity, southern sky, Albrecht Durer, Crux, Centaurus, astrocartography
Young, Arthur		9	2001	moon, clouds, horizon, Muller-Lyer illusions

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Thurston, Huge	Aligning Giza: Astronomical Orientation of the Great Pyramid	9	2001	Egypt, Krufu, The Orion Mystery and the Message of the Sphinx, total solar eclipse, Griffith Observatory, Friends of the Observatory
Knack, Kara	Stuck on Starstruck	9	2001	2001 Mars Odyssey, Greenhouse gases, atmosphere, temperature
Gerstell, Mimi	Keeping Mars Warm	10	2001	Titan, Greek Mythology, Zeus, Pleaides, star atlas, Ptolemy
Knack, Kara	Atlas	10	2001	Cosmology, Edwin Hubble, M31, Milky Way, Einstein, electromagnetic force, weak and strong force, atomic nuclei, big bang
Niemack, Michael	The Evolution of the Universe California's Second Largest Stone Meteorite Lands at Griffith Observatory	11	2001	Meteor, Bruceville, chondrite, iron-nickel Standard time, time zones, railroads, Griffith Observatory's renovation
Krupp, E. C.	Time's Up	11	2001	Griffith Observatory Observatory, "Zippy the Pinhead," Marvel Comics, Los Angeles Terminal Annex Post Office, Knots berry Farm, Dragnet, Rocketeer, Space Stop, Barnsdall Park, LA Library, Disney California Adventure, Hardy Holzman Pfeiffer Associates
Krupp, E. C.	Iconic Observatory	12	2001	John Goodricke, Perseus, Algol, Edward Pigot, delta Cephei
Reed, George	As Silent as the Stars	1	2002	Total solar eclipse on June 21, 2001, Africa, Victoria Falls, Southern Cross, Cannon GL-1 camcorder
Piini, Ernest	An Eclipse over Zambia: A triple Diamond Ring Ceremony	1	2002	Dark matter, Dr. Fritz Zwicky, galaxies
Knack, Kara	In the Dark	1	2002	Lunisolar calendar, moon phases, equinox, solstice, holidays, seasons, China, Jesuits, Mickey Mouse, Temple of Heaven
Aslaksen, Helmer	When is Chinese New Year?	2	2002	Foucault Pendulum, Colonel Griffith J. Griffith, Hugo Balin, Zeiss Mark IV, Universarium, renovation
Knack, Kara	Like a Rolling Stone	2	2002	Between the Lines- Anthony F. Aveni
				Star Gods of the Maya- Susan Milbrath
				The Hole in the Universe-K.C. Cole
Krupp, E. C.	New Books	2	2002	A Field Guide to the Stars and Planets-Jay M. Pasachoff
				Meridian, longitude, time zones, England, Royal Greenwich Observatory, transit circle, George Biddell Airy, Astronomer Royal
Read, Nicholas	Observing Greenwich	3	2002	

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Knack, Kara Pritchard, Matthew	Looking Back but Looking Up Why Are There No Maria on the Moon?	3 4	2002	Dr. Maarten Schmidt, 200-inch telescope on Palomar Mountain. Debra Griffith, 3C 273, Time magazine, quasar, Dr. George Abell, Edwin Hubble, Harlow Shapley, Carl Sagan Clementine, Apollo, Luna 3, tides, Lunar Project Renovation, closing of Griffith Observatory, news media, Hardy Holzman Pfeiffer Associates and Levin & Associates, Architects. Project manager Stegeman & Kastner.. Planning and Construction Division of the City of Los Angeles Department of Recreation and Parks.	
Krupp, E.C. Knack, Kara	Closed Universe Devilish Dust	4 4	2002	Design Meteorite, volcanic dust, Sahara sand telescopes, Meade, Celestron, Ealing Optics, Edmund Scientific, Unitron, SBIG, Orion Telescopes	
Grice, Noreen and Spitzkivsky, V. Matthew	Hot Off the Press!: The Evolution of Astronomy from Professional Endeavor to Popular Access		5	2002	Annular Eclipse, December 14, 2001, Arena camera obscura, Antonio Canaletto, renovation of Halley's comet, comet, Kohoutek, ancient comet observations, comet Borrelly Astronomical reference systems, right ascension, declination, zenith, pole, great circle
Piini, Ernest Knack, Kara Baker, Alexi Shannon	Costa Rica Clouds Eclipse Instrumental Art The Heavens Blaze	5 5 6	2002	Boeing essay contest winners Uranus, Neptune, Pluto, planetesimal, Edgeworth-Kuiper Belt, asteroids, Upsilon Andromedae, Don Dixon, artwork Telescopes, Foucault pendulum, cloud chamber	
Knack, Kara C Krupp, E.C.	Coordinating the Sky The 2002 Boeing Winners	6 7	2002	War of the Worlds, Mars Climate Orbiter, Mars Polar Lander, Armageddon, NBC's Asteroid, Shoemaker- Levy 9, Christopher Columbus and lunar eclipse, Andromeda and Perseus Tides, moon, sun, gravity Magi, Zoroaster, history of astronomy in Iran and the Middle East, Veramin meteorite	
Gharib, Hossein Alizadeh Knack, Kara	The Magi and the Meteorites Imported Merchandise	8 9	2002	Meteors, meteorites, dinosaurs Light Pollution, Flagstaff, Arizona, Lowell Observatory, Naval Observatory Flagstaff Station, Dr. Harold Johnson, Dr. John Hall, Dr. E.C. Slipher, Dr. Arthur Hoag, Dr. G.W. Lockwood, Christian Luginbuhl, Dr. Harold Ables, Dr. Eugene Shoemaker, Dr. David Crawford	
Portree, Dr. David S.F.	Flagstaff's Battle for Dark Skies	10	2002		

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Sligar, Sylvia	Eclipse Dining	10	2002	10 June 2002 partial eclipse, annular eclipse, Orange County
Knack, Kara	Name Game	10	2002	Uranus, Neptune, Pluto, Uranium, Neptunium, Plutonium, nomenclature
Harris, Joel K.	Good to the Last Drop	11	2002	10 June 2002 Annular Eclipse, La Cruz de Loreto Mexico
Krupp, E.C.	Closed for Eclipse	11	2002	10 June 2002 partial eclipse, Griffith Observatory
Krupp, E.C.	Uprooting the View	11	2002	Removal of Observatory Periscope, 4 June 2002, Los Angeles Maritime Museum
Knack, Kara	Desperately Seeking Orion	11	2002	Constellations, Orion
Ridolfo, Frank	Planets That Never Were	12	2002	Vulcan, Intramericurial planet Earth's Twin, co-orbital planet, Planet X, status of Pluto, Bode's Law, asteroids
Knack, Kara	Not Hot	12	2002	Temperature
Pritchard, Matthew	Visitors from Other Stars, The Mystery of Cosmic Rays	1	2003	Cosmic rays, origin
	Launching a Satellite for Public Astronomy	1	2003	Griffith Observatory
				Satellite
Young, Dr. Arthur	What Time Is It, Really?	2	2003	Solar time, apparent solar time, eccentricity effect, obliquity effect, equation of time, the analemma, sunrise and sunset times.
Knack, Kara	Boxing With Gravity	2	2003	Gravity, weightlessness
	An Orbital View of One's Own, A Proposal for an International Space Station Habitation Module	3	2003	International Space Station, Soyuz, Apollo-Soyuz mission, habitation module, crew return vehicle
Torchinsky, Jason				Book Reviews
				*Connecting with the Cosmos- Donald Goldsmith
				*The Universe Next Door- Marcus Chown
				*The Book of the Year- A Brief History of Our Seasonal Holidays- Anthony Aveni
Krupp, E.C.	New Books	3	2003	*Reinventing the Wheel- Jessica Helfand
Knack, Kara	Socking It to Spring	3	2003	Spring equinox
Baker, Alexi	Astronomy in the Round, The Caracol at Chichen Itza, Yucatan, Mexico	4	2003	Arheoastronomy, Mayan, astronomical, observations
Shannon				
Knack, Kara	Sides of a Sphere	4	2003	Sphere, star shapes
Manning, James G.	The Quest for Time	5	2003	History, solar year measurement, Stonehenge, Egypt, waterclock, lunar calendars, Gregorian
Knack, Kara	When It Clouds, It Pours	5	2003	Calendar, mechanical clock, astronomical methods, time zones atomic time
Krupp, E. C.	Eclipse Safari at Sea	6	2003	Cosmic rays, GO cloud chamber
				Total Solar Eclipse of 4 December 2002, eclipse cruise

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Lloyd, Vincent Knack, Kara	Who Measured the Distance to the Sun? Some Star	7	2003	History, Aristarchos, Claudio Ptolomey, Gian Domenico Cassini, Gottfried Wendelin, Jeremiah Horrocks, John Flamsteed, parallax, radar ranging V838 Monocerotis, stellar evolution
Johnson, Francine	Astronomical Illusions	8	2003	Optical illusions, parallax, retrograde motion, meteor radiants, Mach bands, martian canals, black drop, astronomical history
Cook, Anthony Cook, Anthony	Mars, You, and Eye Destination Mars	8	2003	Mars opposition, observation techniques, Observatory plans
Krupp, E. C.	FOTO Towers over the Andes	8	2003	Launch of Spirit, crater Gusev Machu Picchu, Torreon, Joy Picus Mount Stromolo
Krupp, E.C. Knack, Kara	Lost Domes From Earth to Mars Mars Close-Up in Talk by William K. Hartmann	8	2003	Observatory, fire of 18 January 2003 Martians, whimsy
Lloyd, Vincent	Precession of the Equinoxes	9	2003	Lecture announcement Astronomical history, Ptolemy, Hipparchos, Tycho, Newton, precession, obliquity, tidal forces
Krupp, E.C.	New Books From What Planet Do You Come?	9	2003	Book reviews *Mind Over Matter: Conversations with the Cosmos, K.C.Cole *Mapping and Naming the Moon, Ewen A. Whitaker *The Heavens on Fire: The Great Leonid Meteor Storms, Mark Littmann *The History and Practice of Ancient Astronomy, James Evans *Mapping Time, E.G. Richards *Stairways to the Stars: Skywatching in Three Great Ancient Cultures, Anthony Aveni *Hubble Vision, Further Adventures with the Hubble Space Telescope (2nd Ed.), Carolyn Collins Petersen *The Secret Origins of the Bible, Tim Callahan
Knack, Kara	Journey to the Center of the Antumbra	9	2003	Extra-solar planets
Ventimiglia, Matt		10	2003	Annular eclipse of 31 May, 2003, eclipse expedition
Krupp, E.C.	Observatory in Exile Someday Wishing on a Star to Wake Up Where the Clouds Are Far; David Peck Todd's Failed Quest Over the Rainbow	10	2003	Griffith Observatory renovation, photo essay, Griffith Observatory Satellite
Reed, Dr. George	FOTO Interferes with Mount Wilson	11	2003	David Peck Todd, Mable Loomis Todd, biography, astronomical history
Krupp, E.C.		11	2003	Chara Interferometer, Mt. Wilson, Joy Picus

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Knack, Kara	Gravity Under Grace	11	2003	Gravity Recovery And Climate Experiment (GRACE)
Knack, Kara	Urania's Labels	12	2003	Fruit labels, photo essay, whimsy
	Index to Volume 67, 2003	12	2003	Griffith Observer index
Gerstell, Dr. Mimi	Proving the Plurality of Worlds	1	2004	Extrasolar planets, circumstellar disks, pulsar planets, future prospects
Nakamoto, David	Suburban Skies	1	2004	Pleiades, backyard observing
Krupp, Dr. E.C.	Climbing out of Eclipse	1	2004	Caption for Matt Ventimiglia photo, lunar eclipse of 15 May 2003
Knack, Kara	Resolutions	1	2004	FOTO notes, meanings of "resolution"
	Probing the Early Universe			Observational cosmology, big bang, reionization era, inflation, cosmic microwave background, quasar spectra,
	Quasars and the Epoch of			future prospects. Errata, March 2004
Mack, Katie	Reionization	2	2004	Observing Saturn
Nakamoto, David	Suburban Skies	2	2004	
	What a Difference a Day			
Knack, Kara	Makes!	2	2004	FOTO notes, leap year
Young, Dr. Arthur	Reasons for the Season Or How to Barbecue a Chicken	3	2004	Seasons, temperature of earth
Nakamoto, David	Suburban Skies	3	2004	Observing Jupiter
Knack, Kara	Marching on Mars	3	2004	FOTO notes, 2003 Mars Opposition, Griffith Observatory events, NASA rovers. Errata, "Probing the
Anonymous	Shifting the Blame	3	2004	Early Universe" (2004 February)
Rubin, Dr. Alan E.	Numismatic Astronomy	4	2004	Coins, printed money, astronautics, space exploration, rocketry. Aurora Borealis display, New England, 1719
Smith, Dr. Horace A.	The Aurora Returns to New England	5	2004	December 22, Cotton Mather, Thomas Robie, Benjamin Franklin
Nakamoto, David	Suburban Skies	5	2004	Observing guide, comets NEAT (2001 Q4) and LINEAR (2003 T7)
Gharib, Hossein Alizadeh	Zoroaster's "Aurora" & Aristotle's Aither: A Persian History of the Aurora	6	2004	Aurora, Persian astronomy, Nabu-Rimmani, Magi, Aristotle, Avicenna
Nakamoto, David	Suburban Skies	6	2004	Backyard observing, globular clusters, M4, M5
Knack, Kara	The Door to Summer	6	2004	Summer solstice, George Ellery Hale, 200-inch telescope, Griffith renovation
Krupp, E. C.	2004 Boeing Winners	7	2004	Essay Contest
Baker, Alexi				Elizabethan Astronomy, heliocentrism, Shakespeare, John Dee, Leonard Digges, Thomas Digges, Robert
Shannon	Was a Star Danced	7	2004	Recorde, Rosencrantz, Guildenstern
Nakamoto, David	Suburban Skies	7	2004	Backyard observing, Ring Nebula, M57
Knack, Kara	No Plain Planet	7	2004	Saturn, Cassini orbiter, Huygens probe

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Baker, Alexi Shannon	Forbidden Knowledge in a Forbidden City	8	2004	Chinese Astronomy, Jesuit astronomers, Shen Kua, Matteo Ricci, Emmanuel Diaz, Johann Adam Schall von Bell, Peter Li Tianjing, Giacomo Rho, Ferdinand Verbiest, Mei Wending, Wang Xishan, Michel Benoist, Ruan Yuan
Nakamoto, David Knack, Kara	Suburban Skies Tripping the Light Fantastic	8	2004	Backyard observing, star clusters, M6, M7
	Looking Backwards: An Historical Perspective on	8	2004	galaxy mergers retrograde motion, parallax, history, Aristotle, Claudius Ptolemy, Nicolas Copernicus, Giordano Bruno, Galileo Galilei, Tycho Brahe, Johannes Kepler
Jackson, Francine	Retrograde Motion	9	2004	backyard observing,
Nakamoto, David	Suburban Skies	9	2004	Andromeda Galaxy, M31
Knack, Kara	In the Beginning	9	2004	FOTO notes, Genesis spacraft Saturn, Cassini spacecraft, A Ring, image caption
Cook, Anthony	Dark Side of the A Ring	9	2004	light, electromagnetic spectrum, multiwavelenght astronomy, Gamma ray, X-ray, ultraviolet, infrared, radio
Clemons, Andrea	Perception: Light–Visible and Otherwise—and How it Matters	10	2004	backyard observing, globular clusters, open clusters, M2, M52
Nakamoto, David	Suburban Skies	10	2004	Mt. Wilson Observatory 150-foot solar tower telescope, Joy Picus
Krupp, E.C.	FOTO Power at the Solar Tower	10	2004	book review, Stuckley Illustrated, complied by Neil Mortimer
Krupp, E. C. Kanck, Kara	Old Pictures of Old Stones Shadowing the Moon	10	2004	FOTO notes, lunar eclipse 8 June 2004 transit of Venus, Fringilla Zambia transit expedition
Knack, Kara	Urania's Jewelry Are We There Yet?	12	2004	astronomy-themed jewelry, history, fashion
Reed, Dr. George	I'm Bored	1	2005	Astronomical history, whimsy, exploration Photo essay, Saturnian F ring, Cassini spacecraft
Editor	Cheshire Moon	1	2005	Errata, "Looking Backwards" (September 2004)
Editor	Another Backward Glance	1	2005	
Editor Knack, Kara	FOTO Pauses on the Causeway Furthering the Far View	1	2005	Angkor Way, Joy Picus FOTO notes Hugo Ballin murals, central rotunda restoration, back cover caption
Editor	You Are There	1	2005	
	General Old Stars: The Blossoming of Astronomy In the			Astronomical history, Ormsby Mitchel, Cincinnati Observatory, Dudley Observatory,
Landis, Rob	United States	2	2005	American Civil War, Mars
Nakamoto, David	Suburban Skies	2	2005	Backyard observing, M33
Knack, Kara	The Hands of Time	2	2005	FOTO notes, timekeeping

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Janes, Sara	The Hubble Space Telescope: Its History and Science	3	2005	Astronomical History, <i>Hubble Space Telescope</i> , <i>James Webb Space Telescope</i>
Nakamoto, David	Suburban Skies	3	2005	Backyard observing, moon
Knack, Kara	Celestial Carousel	3	2005	FOTO notes
Editor	The Sky at First Just Ghostly Turned a Slighter Shade of Pale	3	2005	Aurora observation, 2004 July 24, Ashcroft, British Columbia, Canada, Barbara Roden
Mosley, John	Pioneering Public Astronomy In the Faster, Cheaper, Better Mini-Planetarium	4	2005	Griffith Observatory, Satellite Facility, mini-planetarium, school shows SpaceShipOne, Ansari XPrize, 21 June 2004
Ventimiglia, Matt	Recreation Vehicle: Get Your Spaceflight Tickets Now!	4	2005	test flight, 29 September 2004 test flight, 4 October 2004 test flight
Nakamoto, David	Suburban Skies	4	2005	Backyard observing, Jupiter
Knack, Kara	Coloring the Sky	4	2005	FOTO notes, spectroscopy Nucleosynthesis, atoms, elements
Whittle, Dr. Mark	Children of the Stars	5	2005	Titan panorama, Chesley Bonestell, center illustration caption
Editor	Back to Titan	5	2005	Whimsy, popular culture, atoms
Krupp, E.C.	Children of the Atom	5	2005	Comet 9P/Tempel 1, Deep Impact comet probes, observation
Cook, Anthony	Stalking the Target of Deep Impact	5	2005	Backyard observing,
Nakamoto, David	Suburban Skies	5	2005	Whirlpool galaxy, M51
Knack, Kara	Seventy and Counting	5	2005	FOTO notes, GO anniversary
Editor	Moment Before Truth	5	2005	Titan, Huygens lander
	R.H. Goddard: Space Camera			History, Robert H. Goddard, space photography, rocketry
Winter, Frank H.	Visionary	6	2005	FOTO notes, whimsy, moon illumination
Knack, Kara	Moon in June	6	2005	Errata, "Recreation Vehicle: Get Your Spaceflight Tickets Now!" (April 2005)
Editor	Space Patrol	6	2005	Mimas, Saturn, Cassini Saturn orbiter
Editor	Sultaneously Seated Mimas	6	2005	Essay contest
Krupp, E.C.	The 2005 Boeing Winners	7	2005	Astronomical history, San Luis Observatory, Argentina, Lewis Boss, Richard Hawley Tucker, Space travel analogue
Bell, Trudy E.	Heartbreak in San Luis: The Nearly-Forgotten Southern Observing Station of the Dudley Observatory	7	2005	Deep Impact, Comet 9P/Tempel 1, observing Guide
Cook, Anthony	A Crash Course in Comet Observing	7	2005	Self-Inflicted Nuclear Annihilation
Editor	Astronomical Icing: The Milankovich Theory	7	2005	Deep Impact logo
Gersell, Dr. Mimi	Matures	8	2005	Milutin Milankovich, ice ages, precession, axial tilt, obliquity, glaciers, climate
	The 2005 Opposition of Mars:			
Nakamoto, David I	What to Expect, Part I	8	2005	Mars opposition, observing guide
Editor	Local Color	8	2005	Mars Spirit photo, Larry's Lookout
Editor	Crowning Glory	8	2005	Griffith Observatory, Planetarium cork floor, renovation photo
Knack, Kara	Comet Fireworks	8	2005	FOTO notes, Deep Impact
Krupp, Dr. E.C.	More Boeing Winners	9	2005	Essay contest

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Jackson, Francine	The First Astronomer John Flamsteed and the Greenwich Observatory	9	2005	John Flamsteed, Royal Astronomical Society, Greenwich Observatory, history
Nakamoto, David I.	The 2005 Opposition of Mars: What to Expect, Part II	9	2005	Mars opposition, observing guide
Editor	A Scar is Born	9	2005	Deep Impact photo, "Comet nucleus, comet 9P/Tempel 1"
Knack, Kara	She Sees Sky	9	2005	FOTO notes
Whittle, Dr. Mark	Primal Scream: Sounds from the Big Bang	10	2005	Big Bang, microwave background, cosmology
Nakamoto, David I	The 2005 Opposition of Mars: What to Expect, Part III	10	2005	Mars opposition, observing guide
Editor	A Monumental Restoration	10	2005	Astronomers Monument, photo, Renovation
Reed, Dr. George	Double Hubble	11	2005	Edwin Hubble, Hubble Space Telescope, biography, history
Editor	See The Constellations in Comfort!	11	2005	Samuel Oschin Planetarium, seats, floor, renovation, photos
Knack, Kara	Creatures of the Crescent Moon	11	2005	FOTO notes
Krupp, Dr. E.C.	Mutiny on the Ecliptic	12	2005	Hybrid annual-total Eclipse 8 April 2005, south Pacific expedition
Keel, Dr. William C.	To the Stars on Silver Wings	1	2006	Rockets, rocket ship, rocket plane, Boeing
Editor	Rocket Planes	1	2006	Space shuttle
Editor	Rocket Plane to Mars	1	2006	Interplanetary rocket place plans, Popular Science magazine (1934)
Knack, Kara	Astronomy's New Awakening	1	2006	FOTO notes
Nakamoto, David	Suburban Skies: Two Winter Jewels	1	2006	Consellation, M37, M38, Pleiades
Wyatt, Ryan	Exploring the Invisible, Observing in Infrared	2	2006	Light, wavelength, IRAS
Ventimiglia, Matt	Eclipsing Art and Literature in the South Pacific	2	2006	Polynesian islands, mythology, Herman Melville
Knack, Kara	Why We Care	2	2006	FOTO notes
Tidey, Steve	A Rough Road to the Stars	3	2006	Radio telescope, Sir Bernard Lovell, dish
Mosley, John	Jonathon Hodge, 1948-2006	3	2006	Biography, obituary, Griffith Observatory, lecturer,
Nakamoto, David	Suburban Skies: A Little Flea on the Back of the Big Dog	3	2006	NGC 2362, Canis Majoris, Hodierne, Herschel
Knack, Kara	Stars in Your Bouquets in Heaven	3	2006	FOTO Notes
Manning, James G.	Lewis and Clark and the Case of the Inept Astronomical Observations	4	2006	American history, navigation, cartography
Knack, Kara	Put on Your Thinking Cap	4	2006	FOTO Notes
Baker, Alexi Shannon	The Mathematical Jewel Completely at Home at Griffith Observatory	5	2006	Astrolabe, ancient astronomy, technology Custodian, William "Bill" Brown, Los Angeles history
Morris, Kenneth L.		5	2006	

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Nakamoto, David	Suburban Skies: Schwassmann-Wachmann 3	5	2006	Comet 73/P, fragments
Jackson, Francine	Dedicated to the Stars: Annie Jump Cannon and the Henry Draper Catalogue	6	2006	Stellar spectra, history, physics
Knack, Kara	Pointing the Way	6	2006	FOTO notes
Nakamoto, David	Suburban Skies: Ask the (Moon) Dust	6	2006	Maria, craters
Nixon, Conor A.	Unriddling the Sphinx: The Huygens Mission to Titan	7	2006	Saturn, moon, William Herschel, Voyager I Planet, Milky Way, constellation, lunar cycle
Taylor, Bernie	Are There Geese on Cygnus 3?	8	2006	
Knack, Kara	All Fall Down	8	2006	FOTO notes
Anonymous	Griffith Observatory's Chris Butler Awarded G. Bruce Blair Medal	8	2006	Samuel Oschin Planetarium, Centered in the Universe, art
Nakamoto, David	Suburban Skies: Jupiter's Complexion	8	2006	Atmosphere, planet, moons, belt, spots, clouds, Great Red Spot
Anonymous	Comet's Swan Song: a Tale in Fragments	8	2006	Schwassman/Wachmann – 73P, tails
Janes, Sarah	Galileo and the Telescope	9	2006	Historical figure, astronomer, Copernican theory, instrument
Knack, Kara	Real Time	9	2006	FOTO notes
Rall, Gloria	Two Colonial Astronomers	10	2006	Benjamin Banneker, David Rittenhouse
Knack, Kara	Astronomical Elevator	10	2006	FOTO notes
Krupp, E.C.	Ken Warren Departs the Administration	10	2006	Business Manager, Griffith Observatory history, retirement
Nakamoto, David	Suburban Skies: The Green Giant	10	2006	Uranus, planet
Keel, William C.	Astronomers Beyond Ozone	11	2006	Ultraviolet camera, telescope
Knack, Kara	The Grand and Galactic Griffith	11	2006	FOTO notes
Verhage, L. Paul	They Came From Outer Space	12	2006	Electroscope, cosmic rays
Krupp, E.C.	Pluto and Beyond	12	2006	Planet, solar system
Krupp, E.C.	Return to Space	1	2007	Griffith Observatory history, renovation, restoration
Krupp, E.C.	Accessing the Universe	1	2007	Griffith Observatory history, renovation, restoration, public announcement
Krupp, E.C.	Griffith Observatory Returns to a Universe Near You	1	2007	Reopen, speech
Krupp, E.C.	On the Wing	1	2007	Event, Galactic Gala, Griffith Observatory history, Gienah, Cygni
Krupp, E.C.	Going Broadway	1	2007	Griffith Observatory history, renovation, restoration, grand opening
Knack, Kara	The Rock and I	1	2007	FOTO notes
Shannon Baker, Alexi	Larceny, Lunacy, & Lenses	2	2007	sextant, Troughton, instrument, circular dividing engine, telescope, spyglass
Cook, Anthony	The Mercury Transit: 8 November 2006	2	2007	Planet
Krupp, E.C.	Curator, Deputy Director, Astronomical Lecturer, Observatory Program Supervisor, staffing	2	2007	
Krupp, E.C.	FOTO Executive Director, award	2	2007	

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Kanas, Nick	Sacrobosco's De Sphaera: Required Reading for Astronomy in the Early European Universities	3	2007	Ancient text, book
Cook, Anthony	New Stunning Pictures from the Sky	3	2007	Photography, star cluster, Rover tracks
Sandler, Robert	Lost in Space: The Future of Space Exploration and the U.S. Space Program	4	2007	Space Race, Space Age, shuttle, space station, NASA
Cook, Anthony	Comet McNaught: The Great Comet of 2007	4	2007	Observe
Krupp, E.C.	Eclipse Roamin' in Roman Africa	5	2007	Travel
Lazio, Joseph	FM Radio in the Dark Ages	6	2007	Technology, electromagnetic waves,
Keel, William C.	Navigation: under the Stars, by the Stars, and to the Stars	7	2007	Apollo, space exploration
Krupp, E.C.	John Mosley's Stellar Evolution	7	2007	Griffith Observatory staff, retirement
Waff, Craig B.	"Providence...will send us a fitting telescope...just at the right time"	8	2007	Lawrence Observatory, Amherst
Krupp, E.C.	Up in Smoke	8	2007	Fire, Griffith Observatory
Taylor, Bernie	At the Intersection of Earth and Heaven	9	2007	Prehistoric, hunter, lunar cycle
Danly, Laura	Yuri's Night at Griffith Observatory	9	2007	Cosmonaut
Lazio, Joseph	By Any Other Name We Lockwood Saves the	10	2007	Planets, asteroids, classification, wanderer
Portree, David S.F.	Universe	11	2007	Astronomer, Lowell Observatory, light
Krupp, E.C.	Eclipsing 'til Dawn	11	2007	pollution, dark sky
Evans, Mona	A Little Night Music: A Story of Music, Madness, and the Milky Way	12	2007	Lunar eclipse
Rall, Gloria	Ah, Sweet Mystery of Life	1	2008	William Herschel, Uranus, discovery,
Krupp, E.C.	Showering with Friends	1	2008	planet
Brogt, Erik	A Night on the Mountain	2	2008	Early earth, prehistoric
Krupp, E.C.	There's No Place Like Holmes	2	2008	Meteors
Lloyd, Vincent	Does Anyone Really Understand the Moon Illusion?	3	2008	Kitt Peak, telescope, dome
Shannon Baker, Alexi	Martian Devils and Saturnian Storms	4	2008	Comet
Nixon, Conor A.	The Quest for Other Earths	5	2008	Rising, setting, Aristotle
Krupp, E.C.	Back in Orbit at Griffith Observatory	5	2008	Weather, clouds, wind, Mars, Martian,
Stahler, Steven	Tales of the Crab	6	2008	hurricane
Krupp, E.C.	Eclipsing Indoors	6	2008	Exoplanets, extrasolar planets
Djorgovski, S.	A Picture Worth a Thousand Stories	7	2008	Satellite, Explorer 1, JPL
George	Celestial Treasure	8	2008	Constellation, Crab Nebula, cloud, star
Knick, Kara	Nearly Fourteen Billion Years of			Solar Eclipse Conference
Krupp, E.C.	Accessorized Time	8	2008	The Big Picture, cluster, galaxy, Messier
Fentress, Stephen S.	The Eclipse Curtain Rises	8	2008	FOTO speech
Fentress, Stephen S.	Where Did the Big Bang Happen?	9	2008	FOTO notes, Cosmic Connection
				Lunar eclipse, Griffith Observatory events
				Edwin Hubble, spectrum

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Krupp, E.C.	Operations Moonwatch	9	2008	Sputnik 1, Keep Watching the Skies! National Federation for the Blind, tactile astronomy
Grice, Noreen Cook, Anthony	Slammin' with the Stars Meet Makemake	10 10	2008 2008	Dwarf planet, Easter island, discovery Henri Poincare, gravitational radiation, Einstein's general relativity Spitzer Space Telescope, anniversary celebration
Gutierrez, Dan D.	Gravitational-wave Astronomy	11	2008	
Danly, Laura	August Heat Wave	11	2008	
Pesavento, Peter	Battle for the Moon: The Untold Story of the Circumlunar Race	12	2008	Russia, Soviet Union, space race
Krupp, E.C.	Eclipse Caravan on the Silk Road	1	2009	Asia, China
Rosenfeld, R.A.	From Uraniborg to Yerkes	2	2009	Tycho Brahe, refractor, telescope
Winter, Frank H.	To the Moon by Scopticon	3	2009	Zeiss projector, Germany
Anonymous	The Other Griffith Observatory	3	2009	Richard Griffith, Sussex, England
Ventimiglia, Matt	On Top of the World and Eclipsing the Midnight Sun	4	2009	Cruise, travel, Artic, north pole
Knack, Kara	Solar Eclipse Sunbathing in Siberia	4	2009	FOTO notes Mars landing, near-earth objects, near-earth asteroids, near-earth comets, NEAs, NECs
Landis, Rob	NEOs Ho! The Asteroid Option	5	2009	Griffith Observatory fifth grade school program
Danly, Laura Krupp, E.C.	Interplanetary Field Trip The Parade's Gone By	6	2009	Tournament of Roses Parade
Frank, Iris	The Universe of Quilts: A Yours-to-Discover Quilt Show	6	2009	International Year of Astronomy, The Parajo Valley Quilt Association
Fentress, Stephen S.	The Man Who Thought Bigger Than JFK	7	2009	James Webb, NASA, space program, moon mission
Olson, Donald W., Doescher, Russell L., Herbert, Joseph C., Newton, Robert H., and Pope, Ava G.	Edvard Munch's Starry Nights, Stormy Skies, and Summer Sunrises	8	2009	Norwegian artist, Getty Center, Starry Night, painting
Keel, William C.	Tremors and Shimmyings: Holding a Telescope Still While the Universe Says, "Cheese"	9	2009	William Herschel, refracting, reflector, equatorial mount, telescope parts
Sherrill, Thomas J.	Starland Stories	9	2009	Children's book, Mary Proctor
Croft, Steve Dewane, Sherry	Mr. Allen's Telescope The Aurora and I	10 10	2009 2009	Allen Telescope Array (ATA), One Hectare Telescope, SETI FOTO notes
Decker, Dwight R. Dewane, Sherry	The Mystery Moon of Mars Booked for the Universe	11 11	2009 2009	Kinderman, The Speedy Journey, science fiction FOTO notes
Keel, William C. Ross, David J. Dewane, Sherry Manning, James G.	Ptolemy's Telescope? Apollobaum First Light How Galileo Democratized the Sky	12 12 12 1	2009 2009 2009 2010	International Year of Astronomy, science of optics Apollo 8 anniversary FOTO notes History, sky ownership, democracy, battle for science and sky

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Dewane, Sherry	Rooted in the Sky	1	2010	FOTO notes, first look through a telescope solar eclipse, 22 July 2009, China, Mongolia
Krupp, E.C.	Shanghaied	2	2010	Pre-industrial astronomy, scientific instruments
Baker, Alexi				
Shannon	The Toyman and the Telescope	3	2010	
Dewane, Sherry	Rooted in the Sky	3	2010	FOTO notes, memoir
Adkins, Larry	The Sky on a Whale's Tooth	4	2010	Parker Scrimshaw, tooth carvings
	Venus Plays Hide and Seek with			
Cook, Anthony	the Moon	4	2010	Astronomical Observer, Venus occultation
Dewane, Sherry	Rock Star	4	2010	FOTO notes, Brian May, Queen
	Griffith Observatory Takes the			
Krupp, E.C.	Cake	5	2010	75th anniversary, Ultimate Cake Off
Dewane, Sherry	Time for Cake	5	2010	FOTO notes, cakes
				math series, planetary orbits, Titus-Bode Law
Jackson, Francine	What's in a Name	6	2010	
Dewane, Sherry	Sunday Afternoon Universe	6	2010	FOTO notes, attendance
	Garrett Serviss, the Would-be-astronaut Who Helped Start the			
Winter, Frank H.	Space Age	7	2010	Biography, Robert H. Goddard, "moon rocket"
Editor	Serviceable Sky	7	2010	Moon Metal, Curiosities of the Sky
Dewane, Sherry	Summer Moon	7	2010	FOTO notes, moon landing, Apollo 11
Editor	Life on Mars up in Smoke	7	2010	Will's Cigarettes
Johnson, AnneMarie	The Largest Spacecraft Ever	8	2010	International Space Station, microgravity, life on a space station
Editor	Postmarked ISS	8	2010	50th anniversary of the Space Age, commemorative stamps
Editor	Space Station Trek	8	2010	Star Trek Enterprise opening sequence
Dewane, Sherry	Shooting Stars	8	2010	FOTO notes, meteorites
Editor	Stationed at Griffith Observatory	8	2010	
	The Telescope Changed Everything	9	2010	Astronomer's monument, ISS International Year of Astronomy, celebration of public astronomy, Tournament of Roses Parade, Google 400th anniversary of Galileo's observations with the telescope
Krupp, E.C.				
Editor	Galileo in Cosmic Conjunction	9	2010	First Lady Michelle Obama visit to Griffith Observatory
	Astronomy on the White House			
Krupp, E.C.	Agenda	9	2010	
Dewane, Sherry	Looking Backward	9	2010	FOTO notes, Andromeda galaxy
				Edgar Allan Poe, "Ulalume," Venus, Astarte
Ross, David J.	The Ashen Light of October	10	2010	
	Paul E. Roques: Astronomical Observer Griffith Observatory			
	5 February 1928-11 August			
Cook, Anthony	2009	10	2010	Obituary, Griffith Observatory staff FOTO notes, relationship between FOTO and Griffith Observatory, Castor and Pollux, the Twins
Dewane, Sherry	Friends in Space	10	2010	

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Krupp, E.C. Editor Dewane, Sherry Clapp, Nicholas	Orchestrating Galileo Observing the Score By the Numbers Looking Down on the Sky	11 11 11 12	2010 2010 2010 2010	International Year of Astronomy, concert, Arthur B. Rubinstein, "Introduction for Cosmic Conjunction," "Program Commentary at the Greek Theatre Performance of Cosmic Conjunction 2009 for Schoolchildren 6 October 2009," "Narrative for Arthur B. Rubenstein's 'Observations'" Musical score, "Observations" FOTO notes, building attendance Borrego Springs
Ventimiglia, Matt  Goldman, Harry Dewane, Sherry	Eclipsing the Moai Electrifying Hollywood: Kenneth Strickfaden, Dr. Frankenstein's Electrician Neighborhood Watch Astronomical Data Diving: Moving Forward by Looking	1  1 1	2011  2011 2011	Easter Island, Rapa Nui, total solar eclipse  Movies, Hollywood, film, Earle L. Ovington Tesla coil FOTO notes, Jupiter close to Earth
Keel, William C. Dewane, Sherry  Editor	Back Mooned  Astronomical Record Restored The Hunt for the Monster Lurking at the Heart of the Milky Way	2 2  2	2011 2011  2011	History, discovery FOTO notes, musings of the moon Pre-renovation photo of Griffith Observatory  Sagittarius A, Sgr A, radio source, black holes
Gutierrez, Dan D. Dewane, Sherry Krupp, E.C. Krupp, E.C.  Luna, Michael Edward Knack, Kara Dewane, Sherry  de Messieres, Genevieve Dewane, Sherry	Favorites Public Transit Diamond Ring A Fire to Be Lighted: Igniting the Fight for Free Thought and the Scientific Revolution The Dust of Time Astornomical Pilgrimages  Interviewing a Computer Greenlight Thinking	3 4 5  6 6 6  7 7	2011 2011 2011  2011 2011 2011  2011	FOTO notes Gottlieb Transit Corridor, meridians Griffith Observatory 75th anniversary  Giordano Bruno, De Revolutionibus, Copernicus Cosmic Connection cleaning FOTO notes, total lunar eclipse Human computer, Caroly Beddow (Gooch), women computers, McCormick Observatory FOTO notes, green flash
Jackson, Francine  Cook, Anthony  Goldsmith, Donald Dewane, Sherry  Krupp, E.C.  Editor Dewane, Sherry	Celestial Navigation with the Birds... and the Butterflies... and the Dashboard of Your Car  Twenty-five Down, Fifty to Go... Farewell to the Shuttle Schooled in Astronomy Astronomical Inspiration Italian Style Pages of Astronomical Inspiration Wandering Astronomically	8  8 9 9 10 10 10	2011  2011 2011 2011 2011 2011 2011	Migration  comet Halley NASA's Space Shuttle series, Endeavor, Challenger, Discovery, Columbia FOTO notes  Galileo, INSAP, fresco, Italy Sixth International Conference on the Inspiration of Astronomical Phenomena FOTO notes

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Keel, William C. Dewane, Sherry	Sword of Orion: Astronomical Advancement and Military Technology Cosmic Connections	11 11	2011 2011	Celestial navigation, navy, moonbounce FOTO notes, jewelery
Ventimiglia, Matt Dewane, Sherry	Swan Song: The Final Flights of America's Space Shuttle Fleet Constellation Pondering	12 12	2011 2011	NASA, Challenger, Discovery, Columbia, Endeavor, Atlantis, Dreamchaser FOTO notes
Pesavento, Peter	Excavating for America's Secret Knowledge of the Soviet Space Program	1	2012	Ivy Green, USS McMorris, Luna 18, NSA, USSR
Krupp, E.C. Editor	Iceland Nights, Northern Lights Hard-copy Universe: 75 Years of Monthly Cosmic Deadlines Drawing Down the Eclipsed Moon	2 2 3	2012 2012 2012	Light of the Valkyries, Vikings, Richard Wagner, FOTO trip, aurorae Griffith Observer, anniversary, magazine, publications Total lunar eclipse, GO events, first live-stream
Injejkian, Susan Armine	The Universe in Your Mailbox: Observing the Observer's Anniversary	3	2012	Griffith Observer, monthly magazine, publications, reprint article
Krupp, E.C.	Another 25 Years of Page-turning Astronomy	3	2012	Griffith Observer, monthly magazine, publications, anniversary
Sufana, Charles	ARISS: Amateur Radio on the International Space Station	4	2012	International program, SAREX, Shuttle Amateur Radio Experiment, communication
Cook, Anthony Dewane, Sherry	The Great Christmas Comet of 2011 Space Debris	4 4	2012 2012	Comet Lovejoy (C/2011 W3), Kreutz sun-grazer FOTO notes, Sputnik 4, Manitowoc Space travel, astronaut life, ISS, International Space Station
Reed, George	Would I Like to Go to Mars? No!	5	2012	Microlensing, plurality of worlds, infinite universe, gravitational lensing, bending light
Philpott, Lydia	Gravity's Optics and Other Worlds The All-new, Positively Improved, Better-than-ever Astronomy	6	2012	Charge-coupled devices, CCD, technological advances
Keel, William C.	Civil War Lessons from Upham's Propaganda	7	2012	Samuel C. Upham, counterfeit, President Lincoln, comet
Lawrence, Ken Editor	Envelopes Why They Don't Land on the White House Lawn Seeing Is Not Believing, and Pictures Can Lie: Reality and Illusion in a Total Solar Eclipse	7 7	2012 2012	Lucknow, India, Candhi Planetarium
Woo, Richard Dewane, Sherry	Drinking the Stars	8 8	2012 2012	Camera versus eye, corona, photography FOTO notes, champagne
Jackson, Francine	Dark Sides of the Moon	9	2012	Total lunar eclipse, occultation, umbra
Danly, Laura Dewane, Sherry	All Space Considered Pilgrims Progress	9 9	2012 2012	Monthly program at Griffith Observatory, GO FOTO notes, GO visitors
Krupp, E.C.	Eclipse Parking	10	2012	Solar eclipse, deep partial eclipse, annular eclipse, The National Parks and Monuments Annual Solar Eclipse of 20 May 2012

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Danly, Laura	All Space Considered Time's Up 2012 and the Maya Calendar	10	2012	Monthly program, science updates December 21, 2012, apocalypse, End of Time, End of the World, doomsday, Millenium, Y2K, baktun, New Age
Krupp, E.C.	End Times Follies	11	2012	Curiosity rover, Mars exploration, GO
Pine, Mark	Public Demonstrates Curiosity about Mars Landing	11	2012	livestream, JPL, events
	Runaway Neutrinos versus the Runaway Universe	12	2012	Nobel Prize, particle physics, neutrinos, expanding universe, dark matter, dark energy, cosmological constant
Goldsmith, Donald	Endeavor Shuttles Huge			
Pine, Mark	Crowds to Griffith Observatory	12	2012	Flyover, last flight
	All Space Considered			
Danly, Laura	August & September, 2012	12	2012	Monthly program write-up Time's Up, Samuel Oschin Planetarium show
Dewane, Sherry	Show Time	12	2012	
Fentress, Stephen S.	In Search of a Cool Approach to Global Warming	1	2013	Climate change, temperature, carbon dioxide, greenhouse gas
	All Space Considered			monthly program write-up, Mars, Curiosity, Opportunity
Danly, Laura	October, 2012	1	2013	
Dewane, Sherry	Martian Curiosity	1	2013	FOTO notes, Curiosity
	Transiting Twice at Griffith Observatory	2	2013	Gottlieb Transit Corridor, Venus transit, local noon
Krupp, E.C.	All Space Considered			Monthly program write-up, Endeavor, Curiosity
Danly, Laura	November, 2012	2	2013	
Wherry, Joshua Michael	H.G. Wells, Mars, Curiosity, and Me	3	2013	The War of the Worlds, alien life, Martians, topography, atmosphere
	All Space Considered			Monthly program write-up, Curiosity, Messenger
Danly, Laura	December, 2012	3	2013	
Cook, Anthony	Comet PANSTARRS Stars in March	3	2013	Comet C/2011
	Copernicus, Capella, and Circumsolar Orbits	4	2013	Karlsruhe, Badische Landesbibliothek Cod. Aug. 167, manuscript, epicycle, equant, eccentric
Philpott, Lydia				Pageant of the Masters, "The Genius," Cycle of Life, Dr. Duling
Krupp, E.C.	In Living Color	4	2013	Monthly program write-up, Endeavor, Mars
	All Space Considered			Reconnaissance Orbiter
Danly, Laura	January, 2013	4	2013	Shuttle Carrier Aircraft, Endeavor, last flight
Ventimiglia, Matt	A Proud Bird Comes Home	5	2013	Monthly program write-up, "Making
	All Space Considered			Astronomy Public: Los Angeles Style"
Danly, Laura	February, 2013	5	2013	FOTO notes, George Stanley, The Oscar, Astronomer's Monument
Dewane, Sherry	Arts and Sciences	5	2013	Director, Dudley Observatory, Dearborn Observatory, Cincinnati Observatory, writing career
	Inventions and Insecurity: George Washington Hough	6	2013	Zeiss telescope, Southern California, STEREO-B HI-I spacecraft
Bell, Trudy E.	Comet PANSTARRS C/2011 L4			Bayer mask, filtered imaging, wavelength bands
Cook, Anthony	Does Los Angeles	6	2013	Observatory programming, Siberian meteor
Keel, William C.	Less Light, More Enlightenment	7	2013	
	All Space Considered			
Danly, Laura	March, 2013	7	2013	
Dewane, Sherry	Getting a Corner on the Year	7	2013	Jerry Factor, equinox, Foucault Pendulum

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Krupp, E.C.	Griffith Observatory, Apocalypse Police	8	2013	Mayan calendar, Aztec calendar, end-of-times, Y2K, "Jupiter Effect," catastrophe
Reitzel, David	All Space Considered April, 2013	8	2013	PANSTARRS, Curiosity, Observatory programming
Shannon Baker, Alexi	A Star to Steer Her by	9	2013	Celestial navigation, Sameul Taylor Coleridge, latitude, longitude, Royal Observatory at Greenwich
Danly, Laura and Reitzel, David	All Space Considered May, 2013	9	2013	Observatory programming, Kepler, habitable worlds, dark matter, ISON
Clapp, Nicholas	Pedestrians on the Road of the Stars	10	2013	Charlemagne, the Milky Way, pilgrimage, St. James
Danly, Laura and Reitzel, David	All Space Considered June, 2013	10	2013	Observatory programming, moon water Planets, Greek, Roman, gods and goddesses, discovery, Johannes Kepler, Galileo Galilei, William Herschel, Isaac Newton, definition of planet
Fittingoff, Andrew	Pluto's Story	11	2013	Observatory monthly programming, Dr. Sally Ride, Valentina Tereshkova
Danly, Laura and Reitzel, David	All Space Considered July, 2013	11	2013	planetaria in schools, education, planetarium boom, Pennsylvania Observatory monthly programming, quasars, black hole
Webb, Rob	Absolutely Worth It! The School-based Planetarium	12	2013	Astronomical instruments, architecture, structures, cardinal directions, poles, megalithic monuments, ancient observatories, solstitial monument
Danly, Laura and Reitzel, David	All Space Considered August, 2013	12	2013	Biography, Associate Director of Griffith Observatory, obituary
Berube, Conrad	Dawn on My Luck			Lunar Atmosphere and Dust Environment Explorer (LADEE), Nove Delphini, Chesley Bonestell, monthly Observatory programming
	A Lesson in Astronomical Alignment	1	2014	Isaac Newton, Woolsthorpe Manor, similarities to Jesus Christ, biography, Grantham, tour
Wallace, Lane	Dr. Edward K.L. Upton: A Remembrance	1	2014	Voyager I, brown dwarf, monthly Observatory programming
Danly, Laura & So, Patrick	All Space Considered September, 2013	1	2014	Jupiter's moons, ocean, Galileo, Pioneer 10 & 11, Voyager, Io, Ganymede, Callisto, topography, composition, ice, water monthly programming, comet ISON, neutrinos
Reed, George	In the Footsteps of a Giant	2	2014	Language, root words, Germanic, Latin, Greek, and Arabic, origins
Retzel, David	All Space Considered October, 2013	2	2014	monthly programming, Chinese moon goddess, Chang'e 3
Gallinger, Cailin	Europa: A Dream of Life	3	2014	
Danly, Laura & Reitzel, David	All Space Considered December, 2013	3	2014	
Lloyd, Vincent	The Meaning of Astronomy	4	2014	
Danly, Laura; Reitzel, David; So, Patrick & Cook, Anthony	All Space Considered January, 2014	4	2014	
Jackson, Francine	No Transit Needed	5	2014	Venus, Mercury, 1874, orbit
Danly, Laura	All Space Considered February, 2014	5	2014	monthly programming, polar vortex, Rosetta, P/2013 P5

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Pine, Mark	Observatory Director Receives Andrew Gemant Award	5	2014	American Institute of Physics (AIP), City Hall
	Meteors Like Flasks, Wine-consencreted Foundation Stones, & Noble Liquors			alcoholic beverages, grapes, sommelier, connections with astronomy
Rosenfeld, R.A.	Reflecting the AÆther NASA Finds Space to Station at	6	2014	
Pine, Mark	Griffith Observatory	6	2014	programming, NASA Day, astronaut
Danly, Laura &	All Space Considered			
Reitzel, David	March, 2014	6	2014	Kepler, monthly programming
Goldsmith, Donald	Neutrinos: Ghost Warriors of the Cosmos	7	2014	Electron, tau, muon, sun, supernova, Wolfgang Pauli, Enrico Fermi, IceCube
Reitzel, David &	All Space Considered,			monthly programming, earthquake,
Danly, Laura	April, 2014	7	2014	gravitational waves, cosmic dust
Reed, George	The Lone Hero Rides Again!	8	2014	Radio drama, art, Edwin Hubble, Milton
	All Space Considered			Humason, Mt. Wilson Observatory
Reitzel, David	May, 2014	8	2014	monthly programming, total lunar eclipse, exoplanet
Silverman, Julie	Nicholas Read	8	2014	Museum Guide, Griffith Observatory, obituary
McSavaney, Matthew J.	Up All Night with SOFIA	9	2014	NASA, Dryden Flight Research Center, Neil A. Armstrong Flight Research Center (ARFC), airborne infrared telescope
Danly, Laura; Reitzel, David &	All Space Considered			monthly programming, international space policy, Russia, crater on Mars
Cook, Anthony	June, 2014	9	2014	
Lovegrove, Elizabeth	The Redwoods and the Ring of Fire	10	2014	Total solar eclipse, umbra, penumbra, annulus, camping, astronomical travel
Cook, Anthony	Better Than a Pinhole-for about a Dollar!	10	2014	Pinhole projection, solar eclipse, tutorial, helioscope projection
Krupp, E.C.	Pay in Blood: The Tax Deadline Total Lunar Eclipse Blood Moon of 14-15 April 2014	11	2014	Total lunar eclipse, tax day, special event, Griffith Observatory, City Council proclamation, umbra, penumbra, blood moon, tetrad
Danly, Laura; Reitzel, David &	All Space Considered August, 2014	11	2014	monthly programming, lunar formation, Rosetta, 67/P Churyumov-Gerasimenko, comet, Phoenix lander, water on Mars, calcium perchlorate, Curiosity lander, iron meteorite, Hubble Space Telescope, star formation, colliding elliptical galaxies
Reitzel, David &				camaro, moon, astronomical distance, Griffith Observatory, 80th anniversary, space suit, Apollo 11, Stellar Evolution
Krupp, E.C.	The Camaro That Came Back from the Moon	12	2014	Liniakea, Antarctica, subglacier lake, cells, life, Lake Whillians, Stardust, interstellar material, supernova, zombie star, Hubble Space Telescope
Danly, Laura &	All Space Considered September, 2014	12	2014	trainwreck, time, time keeping device, time zones, standard time,
Reitzel, David	The Train Wreck That Changed Time			Curiosity, Opportunity, Bruce Jakosky, MAVEN, MOM, Mars, exoplanet, water, Neptune-sized, HAT-P-11b
Jackson, Francine		1	2015	
Danly, Laura; Reitzel, David &	All Space Considered October, 2014	1	2015	
Cook, Anthony				

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Giodani, Adrian	TMI: A Supernova Explosion of Astronomical Data and How to Ride the Wave	2	2015	data sets, data collection, data storage, Low Frequency Array (LOFAR), Cherenkov Telescope Array, Large Synoptic Survey Telescope (LSST), CERN, Square Kilometre Array (SKA), code, scientific software, computer science, citizen science
Danly, Laura & Reitzel, David	<i>All Space Considered November, 2014</i>	2	2015	Virgin Galactic SpaceShipTwo crash, total lunar eclipse, partial solar eclipse, Emily Lakdawilla, Comet 67P/Churyumov-Gerasimenko, Rosetta, Philae, MAVEN, New Horizons, Hubble Space Telescope, HL Tauri, protoplanetary disk, Atacama Large Millimetre Array (ALMA) eclipse, transit, transit of Mars, transit of Venus, Kepler, doppler shift, Rossiter-McLaughlin effect, Spitzer Space Telescope, occultation, Voyager 2, Cassini, Chandra X-Ray Observatory, parallax shift, gravitational lensing, Apollo 8, Hubble Space Telescope
Keel, William C	A Universe of Photobombs	3	2015	Comet 67P/Churyumov-Gerasimenko, Rosetta, Philae, Gunther Witzel, black hole, G2, Elizabeth Cochran, earthquake warning system, USGS
Danly, Laura; Reitzel, David & So, Patrick	<i>All Space Considered December, 2014</i>	3	2015	Comet Lovejoy Comes to the Party
Cook, Anthony	Comet Lovejoy Comes to the Party	3	2015	Lovejoy, C/2014 Q2, comet Central Asia, Samarkand, Uzbekistan, astronomical tourism, Ulugh Beg, observatory, blood moon, lunar eclipse, livestream
Krupp, E.C.	Eclipse Road to Samarkand	4	2015	partial solar eclipse, USC Trumpet quartet, Richard Strauss, Also Sprach Zarathustra, livestream, Donovan Leitch, "Sunshine Superman"
Krupp, E.C.	Sunshine Superman Solar Eclipse	4	2015	New Horizons, Pluto, Alan Stern, Charon, Kuiper Belt, Kuiper Belt Object, Curiosity, methane, Mars, drilled, Scott Kelly, ISS, SpaceX, Falcon 9, Dawn, Ceres, Supermoon, Minimoon, lunar eclipse, blood moon
Danly, Laura & Reitzel, David	<i>All Space Considered January, 2014</i>	4	2015	Griffith Observatory, James Dean, and the Universe
Knack, Kara	Griffith Observatory, James Dean, and the Universe	5	2015	FOTO notes
Danly, Laura; Reitzel, David & So, Patrick	<i>All Space Considered February, 2014</i>	5	2015	Venus Express, ESA, David Grinspoon, vortex, upside down tornado, deuterium, Chandra X-Ray Observatory, black hole, Milky Way, Sagittarius A, x-ray flare, gas bubble, Beagle 2, MRO, exoplanet, Kepler Space Telescope, Kepler-438b, habitable zone, red dwarfs
Krupp, E. C.	Plutonic Relationships Part 1: First Blush	6	2015	Pluto, Hades, Uranus, solar system, International Astronomical Union, short stories, "The Whisperer in Darkness", mythology, Wonder Woman

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Danly, Laura; Reitzel, David; & So, Patrick	All Space Considered March, 2015	6	2015	Dawn mission, Ceres, Mark Rayman, water vapor, Mars, Terra Cimmeria region, Scholz's Star, Oort Cloud, SDSS J1038+4849, SDSSCGB 8842.3, SDSSCGB 8842.4, gravitational lensing Pluto, popular culture, Charon, Nix, Hydra, Kerberos, Styx, mythology, New Horizons, planetary geology, dwarf planets, Neil deGrasse Tyson, philately, planet classification
Krupp, E. C.	Plutonic Relationships Part 2: Bonding and Heartache	7	2015	Scott Kelly, Soyuz TMA-16M spacecraft, Mikhail Konienko, International Space Station, astrobiology, astronautics, Jupiter, solar system, Super-earths, Saturn, quasar, black hole, Lijiang Telescope, J0100+2802
Reitzel, David	All Space Considered April, 2015	7	2015	China, Shenzhou spacecrafts, Tiangong-1, Tsien Hsue-shen, Dong Fang Hong-1, World War II, aeronautics, Theodore von Karman, People's Republic of China, Red Scare, Caltech, Chinese Academy of Space Technology
McNamara, Bernard Reitzel, David Danly, Laura; Reitzel, David; & So, Patrick	Tsien, Hsue-shen and China's First Satellite: A Collision between Politics and Technology Pi Day All Space Considered May, 2015	8	2015	Pi day, public events
Dolan, Joseph F.	Einstein in the Elevator	9	2015	SpaceX, Falcon 9, rocket landing, Saturn, Enceladus, E ring, NASA, astrobiology Einstein, gravity, special relativity, general relativity, space-time
Danly, Laura; Reitzel, Daivd	All Space Considered June, 2015	9	2015	NASA, Dawn, New Horizon, dwarf planets, Ceres, Europa, astrobiology, M31 galaxy, Andromeda galaxy, halo, absorption spectrum, David Helfand, Quest University Canada
Ventimiglia, Matt	The Ultima Thule Frostbite First Day of Spring Total Solar Eclipse of 2015	10	2015	Arctic eclipse, Ultima Thule, Spitsbergen, Greenland, arctic circle, spring equinox, total solar eclipse, Svalbard, Aurora Borealis, solar corona, TravelQuest Space Foundation, Barnum & Bailey, Colorado, Yuri's Night, 31st Space Symposium, Vulcan rocket, aerospace awards, STEM education
Ventimiglia, Matt	A Ringling Bros. Rocket Circus	10	2015	Standard candles, cepheid variables, Magellanic Clouds, halo, Sloan Digital Sky Survey, star phases, helium ionization, telescopes, spectrograph, emission spectra, graduate research
Spalding, Eckhart A.	In Pursuit of RR Lyraes	11	2015	Pluto, Charon, New Horizons, Tombaugh Regio, Sputnik Planum, planetary atmospheres, Kepler, Kepler-452b, exoplanets, Venus, volcanic activity, Venus Express, Philae, Comet 67P/Churyumov- Gerasimenko
Danyl, Laura; Wolters, Nicole	All Space Considered August, 2015	11	2015	

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Jackson, Francine	For the Love of a Woman	12	2015	Milton Humason, Mount Wilson, 100-inch Reflector, George Ellery Hale, Edwin Hubble, Cepheid Variables, Fritz Zwicky, astrophysics, dark matter, Schmidt Telescope, universe expansion, Hubble constant
Krupp, E. C.	Pluto Party	12	2015	Pluto, NASA, New Horizons, Johns Hopkins University Applied Physics Laboratory, Southwest Research Institute, Griffith Observatory events, Long Range Reconnaissance Imager, satellite imagery, SB-350 Clean Air and Pollution Reduction Act of 2015
Cook, Anthony	<i>All Space Considered September, 2015</i>	12	2015	Ceres, Dawn, NASA, planetary geology, Comet Churyumov-Gerasimenko, European Space Agency, Rosetta, Philae, perihelion, New Horizons, 2014Mu69
Tenn, Joseph S.	From Ukiah to Yale: Frank Schlesinger and the Measurements of Stellar Positions	1	2016	Stellar distances, parallax, Yerkes Observatory, George Ellery Hale, International Altitude Service, Edward E. Barnard, Allegheny Observatory, astrometry, photometry, International Union for Cooperation in Solar Research, Yale Observatory, Yale Southern Station, Margaretta Palmer, Louise F. Jenkins, Ida M. Barney, Hipparcos, Tycho Catalogue NASA, recurring slope lineae, deliquescence, physical cosmology, submillimeter light, submillimeter galaxies, simulations, Occator Crater, Ceres, Dawn, complex crater
Danly, Laura; Reitzel, David; & Cook, Anthony	<i>All Space Considered October, 2015</i>	1	2016	Earth, planetary motion, Galileo Galilei, Dialogue Concerning the Two Chief World Systems, Earth's rotation, aberration, Jean-Bernard-Leon Foucault, Foucault Pendulum, Chandler wobble, precessional motion, atomic clocks, tidal forces, The International Earth Rotation and Reference Systems Service, Coordinated Universal Time, Mars sol
Fentress, Stephen S.	Our Unstill Earth	2	2016	<i>Kepler Input Catalog, KIC 8462852, extrasolar planets, alien life, transits, Dyson sphere, George Musser, non-locality, quantum entanglement, Spooky Action at a Distance</i>
Danly, Laura; Reitzel, David	<i>All Space Considered November, 2015</i>	2	2016	J. C. Kapteyn, International Astronomical Union, paradigm shift, cosmology, solar system, universe expansion, standard candle, parallax, Carte du Ciel, nebulae, ellipsoid of revolution, universe mapping, cosmic dust, galactic plane, spectroscopy
Dolan, Joseph F.	Kapteyn Universe	3	2016	

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Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered December, 2015</i>	3	2016	Mars, Phobos, planetary rings, New Horizons, Pluto, volcanic activity, ice volcanoes, craters, Sputnik Planum, Blue Origin, New Shepard, SpaceX Amateur astronomy, astrophotography, star parties, school, public outreach, education
Regen, Grant	A Universal Interest	4	2016	Blood moon, total lunar eclipse, tetrad, apocalypse, public events, Immortal Beethoven, umbra shadows
Krupp, E. C.	Beethoven's Blood Moon	4	2016	Ceres, NASA, Dawn, Occator, magnesium sulfate, water vapor, Falcon 9, SpaceX, vertical touchdown, orbital booster, aerospace research, All 2015 Considered
Reitzel, David; Al-Ahmed, Sarah; & Cook, Anthony	<i>All Space Considered January, 2016</i>	4	2016	Van Allen radiation belts, biography, geomagnetism, aurorae, cosmic radiation, atmosphere, proximity fuze, rockoons, International Geophysical Year, Project Vanguard, Explorer 1, NASA, history, magnetosphere, rover, education, heliopause, "Mark of One Man"
Wherry, Joshua M. Hero	Dr. James Van Allen: Outer Space Super Star and American Hero	5	2016	Planet 9, Kuiper Belt, solar system, Pluto, New Horizons, Sputnik Planum, geology, spectroscopy, Comet Churyumov-Gerasimenko/67P, Rosetta, snowflakes, galaxy collisions, exoplanets, globular clusters
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered February, 2016</i>	5	2016	Indonesia, total solar eclipse, travel, sundial, Borobudur, archaeoastronomy, FOTO, pinhole projection, corona, chromosphere, Volendam, Singapore
Krupp, E. C.	Eclipse Spies in the Java Sea: The Spicy Islands Total Solar Eclipse of 9 March 2016	6	2016	Gravitational waves, laser interferometer, LIGO, black holes, space-time, Einstein, LISA, Chandra X-ray Observatory, galaxy, accretion disk, X-rays, cosmic microwave background, inverse Compton scattering, Ken Carpenter, NASA, Transiting Exoplanet Survey Satellite, TESS, James Webb Space Telescope, JWST, Wide-Field Infrared Survey Telescope, WFIRST, Large Ultraviolet-Optical-Infrared telescope, LUVOIR, Stellar Imager array, Terrestrial Planet Imager, exoplanets, SETI
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered March, 2016</i>	6	2016	Marco Polo, exploration, Asia, cartography, Polaris, sigma Octantis, Large Magellanic Cloud, globes, arctic circle, magnetic north, true north, compass, North Pole, Gyrfalcons
Pesavento, Peter	Where Did Marco Polo Go? A North Star Mystery	7	2016	Indonesia, umbral shadow, moon, travel, Java, natural disasters, FOTO, total solar eclipse, Wallace Line, cruise
Ventimiglia, Matt	Eclipse Side Trip: In the Neighborhood of the Wallace Line	8	2016	

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Krupp, E. C.	Celestial Solecism and Astronomical Accuracy: Navigating Nomenclature with Charon	8	2016	New Horizons, Pluto, Charon, dwarf planet, linguistics, planet naming, James Christy
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered</i> April, 2016			Supernovae, stellar remnants, Supernova 2012cg, Kepler Space Telescope, Pluto, New Horizons, Charon, space dust, Michelle Thaller, NASA, climate change
Reitzel, David; Al-Ahmed-Sarah	<i>All Space Considered</i> May, 2016	8	2016	Supernovae, X-rays, Local Bubble, iron-60, Hubble Space Telescope, Bubble Nebula, interstellar dust, SpaceX, Falcon 9, vertical touchdown, Red Dragon
Goldsmith, Donald	Dark Energy in Einstein's Office	9	2016	Dark Energy, Einstein, relativity, total solar eclipse, Cosmological Constant, universe shape, Hubble Constant, dark matter, cosmology, anthropic principle, multiverse, Euclid mission
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered</i> June, 2016	9	2016	International Space Station, Bigelow Expandable Activity Module, BEAM, Keck telescope, star formation, exoplanets, Kepler Space Telescope, transit method
Sandler, Robert	Brave New Worlds: The Peril and Promise of Asteroids, Comets, and Near-earth Objects	10	2016	Asteroids, comets, meteoroids, archaeoastronomy, spectroscopy, Oort Cloud, long-period comets, periodic comets, asteroid belt, Kuiper Belt, near-earth objects, Rosetta, Galileo, Dawn, collision prevention, Torino Impact Hazard Scale, deflection, asteroid mining
Al-Ahmed, Sarah; Reitzel, David; Chapman, David M. F.; LeBlanc, Cathy Jean	<i>All Space Considered</i> July, 2016	10	2016	LIGO, interferometer, gravitational waves, black hole, Einstein, Pluto, New Horizon, subsurface ocean, Michelle Thaller, Juno, Jupiter, satellites, planetary astronomy
	In Search of the 13th Mi'kmaw "Moon"	11	2016	Canadian aborigines, Mi'kmaw Chief Moon, Mi'kmqaq, calendars, Two-eyed Seeing, ethnoastronomy
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered</i> August, 2016	11	2016	galaxies, star formation, black holes, stellar winds, ram pressure stripping, galaxy collisions, halo, XMM-Newton, spectroscopy, Milky Way, Mars, Recurring slope lineae, Mars Reconnaissance Orbiter, CRISM, HiRISE, CTX, planetary geology, deliquescence
Winter, Frank H.	Name-Dropping Past Neptune: "Byrd," "Kronos," "Tombaugh," "Percival," "Minerva," "Bacchus," and the Early History of Pluto	12	2016	Solar system, nomenclature, Pluto, Planet X, photometry, Clyde Tombaugh, blink microscope, newspaper, nebular hypothesis, Venetia Burney Phair, Charon, trans-Neptunian objects, planet classification

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Dolan, Joseph F.	Astronomy through the Eye of Buffon's Needle	1	2017	Theodore Lyman, Charles Messier, Buffon's needle, Lyman-alpha clouds, uv light, quasars, absorption spectrum, spectra, red shift, hydrogen clouds, gravitational lensing, Einstein, relativity, Messier object, galaxies, clusters, George Louis LeClerc, Compte de Buffon, probability
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered, October, 2016</i>	1	2017	Juno, Jupiter, NASA, poles, aurorae, radio emission, planetary meteorology, JIRAM, infrared, ESO, exoplanet, Proxima Centauri, Proxima b, Rosetta, comet 67P/Churyumov-Gerasimenko, exobiology, Philae
Abel, Paul G.	Watch This Space	2	2017	Zeiss telescope, Mars, Saturn, rings, planetary meteorology, amateur astronomy, Venus, planetary phases, transits, xenoarchaeology, Jupiter, magnetic fields, belts, Great Red Spot, moons, Galileans, drawing, opposition effect
Nakamoto, David; Krupp, E. C.	Party Favors	2	2017	Griffith Observatory, star party, planetary photography, LAAS, Venus, Mercury, Jupiter, Mars, Saturn, Moon
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered November, 2016</i>	2	2017	Axis of rotation, sun tilt, plane of the ecliptic, Planet Nine, DPS 48/EPSC 11, ExoMars, astrobiology, ESA, Roscosmos, Schiaparelli EDM, Trace Gas Orbiter TGO, Mars
Al-Ahmed, Sarah	<i>All Mars Considered</i>	2	2017	Mars, MARS: Our Future on the Red Planet, National Geographic, Leonard David, Rob Manning, JPL, Andre Bormanis, colonization, manned mission
Regen, Grant	Back to the Future: Astronomical Discovery and the “End” of Science	3	2017	Richard Feynman, John Horgan, scientific progress, dark matter, MACHOs, MOND, WIMPs, non-baryonic particles, axions, Edwin Hubble, accelerating universe, dark energy, CMB, cosmological constant, Big Bang, quintessence model, exoplanets, astrometry, barycenter, Doppler effect, transit, interferometry, moons, SETI, habitable zone, Enceladus, Europa, Titan, Mars, astrogeology, MAVEN, Kuiper belt, Oort Cloud, dwarf planets, trans-Neptunian, Dawn, Rosetta, New Horizons, future, space missions
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered December, 2016</i>	3	2017	Pluto, liquid water, Sputnik Planitia, tidal locking, Mars, Curiosity, Egg Rock, laser-spectrometry, ChemCam, drought, recurring slope lineae, lithium, stellar novae, Type 1a supernovae

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Fisher, Paul	Iterating West: The Astronomical Observations of Lewis and Clark	4	2017	Meriwether Lewis, William Clark, latitude, longitude, cartography, Thomas Jefferson, sextant, polaris, chronometer, lunar distance method, spherical trigonometry LIGO, Gravitational waves, exoplanets, TESS, Pluto, Mars, solar system, SpaceX, David Grinspoon, astrobiology, Earth in Human Hands, planetology
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered January, 2017</i>	4	2017	Habitable zone, Goldilocks zone, exoplanets, Earth, astrobiology, solar system, models, cosmology, Giordano Bruno, greenhouse effect, atmosphere, Sun, magnetic field, magnetic braking, transit, Doppler, TESS, James Webb Telescope
Luna, Michael	Oases in the Sky: The Search for Habitable Worlds	5	2017	AAS, black holes, Chandra X-ray Observatory, galaxy clusters, interstellar space, garnet stars, plate tectonics, Milky Way, red nova, KIC 9832227, metallic hydrogen
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered February, 2019</i>	5	2017	Kazakhstan, Expedition 45/TMA-18M, Soyuz Mission, ISS, Russia, rocket launch, cosmonauts, monuments, photography Mars, Matt Golombek, JPL, Mars 2020 Rover, landing location, astrogeology, Jezero crater, Syrtis, Columbia Hills, TRAPPIST-1, exoplanets, habitability, 47 Tucanae, intermediate-mass black hole
Leseman, Curtis	Inside the Russian Space Program: An Eyewitness at Baikonur	6	2017	Pluto, New Horizons, planet classification, Charon, Planet X, planet nine, Clyde Tombaugh, solar system, public reaction, dwarf planets, IAU, Kuiper belt, Alan Stern, planetary imaging, Sputnik Planitia, Tombaugh Regio, icebergs, nitrogen ice, atmosphere, tidal locking, Mordor Macula, Serenity Chasma, astrogeology, 2014 MU69
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered March, 2017</i>	6	2017	All-American Transcontinental Total Solar Eclipse, total solar eclipse, photographs, paintings, stamps, archaeoastronomy, mythology
Goldsmith, Donald	Pluto Redeemed	7	2017	Liz Carey, JPL, climate change, precipitation, drought, spectrometer, ASO, Titan, liquid methane, liquid ethane, carbonation, 2007 OR10, kuiper belt, dwarf planet, moon
Krupp, E. C.	Devoured by Darkness	8	2017	Cyanotype, Lia Halloran, Harvard College Observatory, history, women astronomers, art exhibit, photometry, galaxies
Reitzel, David; Gruenberg, Bill	<i>All Space Considered April, 2017</i>	8	2017	
Krupp, E. C.	Cosmic Blueprints	9	2017	

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Perea, Daniel; Reitzel, David	<i>All Space Considered</i> May, 2017	9	2017	Solar eclipse, archaeoastronomy, E. C. Krupp, merchandise, Peggy Whitson, NASA, astronaut, record breaking, Enceladus, Cassini, INMS, spectrometer, hydrothermal vents, CHNOPS
Batt, Geoffrey E.	Like, Wow! A Cryptic Signal for Lonely Souls	10	2017	Wow!, SETI, radio signals, 1420 MHz, Jerry Ehman, 6EQUJ5, Big Ear telescope, philosophy, geology, paleontology, Fermi Paradox, Antonio Paris
Grueneberg, Bill; Reitzel, David	<i>All Space Considered</i> June, 2017	10	2017	Jupiter, Juno, atmosphere, magnetic field, microwave radiometer, aurorae, Svalbard Seed Vault, climate change, LIGO, gravitational waves, black holes, GW170104
Krupp, E. C.	Eclipsing Tectonically	11	2017	All-American Transcontinental Total Solar Eclipse, total solar eclipse, Wyoming, Phelps brothers, eclipse mythology, traveling, Idaho, photographs
Krupp, E. C.	Krupp, E. C.	12	2017	Total solar eclipse, vacationing, branding, photographs
Reitzel, David; Al- Ahmed, Sarah	<i>All Space Considered</i> July, 2017	12	2017	Exoplanets, Kepler, mini-Neptunes, Parker Solar Probe, heliophysics, solar wind, Sun, total solar eclipse, eclipse safety, solar filter
Rybarczyk, Daniel Krupp, E. C.	White Continent, Red Planet Imagining Antarctica	1 1	2018	Antarctica, Mars, research, geomorphology, psychology, thermal contraction polygons, radioactive isotopes, volcanic activity, Antarctic Dry Valleys, Olympus Mons, facies, Tharsis Montes, glaciation, astrobiology, concentric crater fill, Phoenix Mars Lander, Mars 2020 mission
Reitzel, David; Al- Ahmed, Sarah	<i>All Space Considered</i> August, 2017	1	2018	Aqua, Antarctica, Larsen C ice shelf, iceberg A68, climate change, calving, Oort Cloud, WISE, long-period comets, Juno, Jupiter, Red Spot
Prud'homme- Généreux, Annie	Ghost Hunting: The Search for Dark Matter	2	2018	Dark Matter, galaxies, Dark Energy, Fritz Zwicky, gravity, galaxy clusters, Vera Rubin, invisible mass, gravitational lensing, Bullet cluster, MACHOs, WIMPs, Standard Model, quarks, protons, leptons, neutrino, axion, supersymmetry, satellites, cosmic rays, scintillation detectors, Sudbury Neutrino Observatory, DEAP-3600
Reitzel, David; Al- Ahmed, Sarah	<i>All Space Considered</i> September, 2017	2	2018	Exoplanet, Tau Ceti, Doppler method, EBLM J0555-57Ab, eclipsing binary system, stars, Tim Russ, amateur astronomy

<u>author</u>	<u>title</u>	<u>mo</u>	<u>year</u>	<u>key words</u>
Jackson, Francine	Light Speed	3	2018	Speed of light, Relativity, Ole Romer, Jupiter, James Bradley, Fizeau-Foucault apparatus, Marie Alfred Cornu, ether, Michelson-Morley Interferometer
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered October, 2017</i>	3	2018	LIGO, gravitational waves, Nobel Prize, Mars, Boron, Gale Crater, astrobiology, Linda Spilker, Cassini, magnetic field, rings
Ventimiglia, Matt	Fifty Years of 2001: Back to the Future	4	2018	<i>2001: A Space Odyssey, SETI, cinematography, popular culture, Stanley Kubrick, science fiction, first-contact, exoplanets, little green men</i>
Krupp, E. C.	Off-color Eclipse	4	2018	Total lunar eclipse, Super Blue Blood Moon, supermoon, Lunation 1176, blue moon, blood moon, public event, Zeiss, Dragon Be Gone
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered November, 2017</i>	4	2018	Gravitational waves, LIGO, Fermi Gamma-ray Space Telescope, GW170817, neutron stars, kilonova, rapid neutron capture, Amy Mainzer, NEOWISE, near-earth objects, NEOCam Project, solar system, Oumuamua, Asteroid 1I/2017 U1
Ventimiglia, Matt	Eclipsing the Jackalope	5	2018	All-American Transcontinental Total Solar Eclipse, travelling, dinosaur museums, Yellowstone National Park, Wyoming, Buffalo Bill, jackalope, South Dakota
Al-Ahmed, Sarah	<i>All Space Considered December, 2017</i>	5	2018	Supernova, iPTF14hls, pulsational-pair-instability supernova, David Jewitt, Oumuamua, interstellar asteroid, Mars, recurring slope lineae, planetary topography
Elchert, Ken	Prophecy, Jupiter, and the Dead Sea Scrolls: A New Aspect of the Star of Bethlehem	6	2018	Star of Bethlehem, Christianity, religion, astrology, Sharru, Babylon, Mesopotamia, conjunctions, Dead Sea Scrolls
Reitzel, David; Al-Ahmed, Sarah	<i>All Space Considered January, 2018</i>	6	2018	All 2017 Considered, Moon, Chandrayaan-2, Chang'e 4, Parker Solar Probe, Sun, BepiColombo, InSight, Hayabusa 2, OSIRIS-REx
Dolan, Joseph F.	Things are Seldom What They Seem: The Aberration of Starlight	7	2018	Light, electromagnetic spectrum, longitude, James Bradley, parallax, ellipses, aberration of starlight, stellar motion, ecliptic, gestalt, wave-particle duality, Huygens principle, absolute velocity, luminiferous ether, Michaelson-Morley experiment, special relativity
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered February, 2018</i>	7	2018	Mars, water ice, Clifford Johnson, science education, John Young, astronaut memorial
Nakamoto, David	Going the Distance on the Observatory Lawn	8	2018	Griffith Observatory, solar system, lawn model, Kuiper belt, Oort Cloud, scale
Rawlins, Dennis	Did Eratosthenes Err by Air?	8	2018	Eratosthenes of Cyrene, Ptolemy, Poseidonios, earth's circumference, stades, atmospheric refraction

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Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered March, 2018</i>	8	2018	American Astronomical Society, Orion, nebula, brown dwarves, exoplanets, TESS, James Webb Space Telescope, FRB 121102, ASTRON, fast radio bursts, magnetar, neutron stars, polarization, SpaceX, Falcon Heavy Booster, Falcon 9
Bray-Ali, Noah	Frame Drag	9	2018	General relativity, gravitational waves, black holes, frame drag, sensory perception, frame of reference, sunspots, moon phases, pendulum, quasar, magnetosphere, gravito-electric fields, Lense-Thirring effect
Reitzel, David	Going Dutch: A Date with Andromeda in the Netherlands	9	2018	Netherlands, Hertzsprung-Russell diagram, Andromeda Galaxy, Leiden Observatory, PHAT, SPLASH, PAndAS, Kapteyn Astronomical Institute
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered April, 2018</i>	9	2018	Stephen Hawking, memorial, Scott Kelly, astronautics, gene expression, telomeres, Tiangong-1, reentry, China
de Grijs, Richard	Standard Sirens: Listening to Gravitational Waves	10	2018	Gravitational waves, black holes, mass quadrupole moment, Einstein, General relativity, dipole radiation, LIGO, GW150914, standard sirens, cosmology, Doppler shift, standard candles
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered May, 2018</i>	10	2018	<i>All Space Considered anniversary, TESS, exoplanets, satellite launch, Mars, InSight, Elysium Planitia</i>
Decierdo, Pecier Paul C.	Chasing after the Moon's Shadow	11	2018	Total solar eclipse, All-American Transcontinental Total Solar Eclipse, umbra, travelling, Wyoming, diffuse light, astrophotography
Babcock, Angela	A Marriage Made in Heaven	11	2018	Total solar eclipse, All-American Transcontinental Total Solar Eclipse, wedding, Idaho
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered June, 2018</i>	11	2018	Asteroid 514107 2015 BZ509, interstellar, counter-clockwise, Europa, Galileo, water plumes, Europa Clipper, astrometry, Gaia satellite, star catalog
Dahm, S. E.	Unlocking the Secrets of Star Formation: The Early History	12	2018	Star formation, nebulae, nebular hypothesis, solar system, Kelvin-Helmholtz timescale, Coulomb barrier, nuclear fusion, proton-proton chain, Hertzsprung-Russell diagram, CNO cycle, hydrostatic equilibrium, interstellar medium, T Tauri stars, accretion disks, protostar, star clusters, association, Herbig-Haro objects, photometry, nebulosity
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered July, 2018</i>	12	2018	Mars, dust devils, global storms, Yao Yin, Boyajian's Star, Tabby's Star, KIC 8462852, chromatic dimming, interstellar medium, Ceres, organic material, Dawn, spectroscopy

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Leseman, Curtis	Eclipsing at the End of the Road	1	2019	Path of annularity, Antarctica, partial solar eclipse, travelling, Argentina
Al-Ahmed, Sarah; Reitzel, David Somers, Jim	All Space Considered August, 2018 Glen Richard Miller	1 1	2019 2019	Mars, subsurface lake, Mars Express, MARSIS, David A. Weintraub, exobiology, cross-contamination, planetary protection, Jupiter, moons, Planet Nine, Valetudo Memorial, Griffith Observatory, staff Aurora borealis, northern lights, Galileo, mythology, archaeoastronomy, aurora australis, magnetic fields, atmosphere, chemistry, crackling, terrella, plasma, solar wind, magnetotail, Ian Mann, coronal mass ejections, magnetometer, AuroraWatch, solar system, blue proton aurora, AuroraSaurus, NOAA, Steve, Swarm, citizen science
Prud'homme-Généreux, Annie	Why Endure Polar Bears, Pitch-Black Night, & -40°? The Aurora in Its Natural Habitat	2	2019	Moon, water ice, Chandrayaan-1, Robert Pappalardo, Europa Clipper, Europa, Ultima Thule, New Horizons, 2014 MU69
Al-Ahmed, Sarah; Reitzel, David	All Space Considered September, 2018	2	2019	Light, radiation, wavelength, electromagnetic spectrum, Allegory of the Cave, optical, radio waves, radio waves, Hertz, Hubble, CMB, Infrared, Herschel, ultraviolet, Ritter, X-ray, Gamma-ray, Rontgen, Villard
Rybarczyk, Daniel	More Than the Eye Can See	3	2019	Hayabusa 2, asteroid, 162173 Ryugu, MINERVA II, MASCOT, NASA, Diamond Anniversary, history, Dharma Planet Survey, Vulcan, exoplanet, 40 Eridani A, HD 26965
Al-Ahmed, Sarah; Reitzel, David	All Space Considered October, 2018	3	2019	Exoplanets, Kepler-90, 51 Pegasi b, Star Wars, Tatooine
Abron, Laura-May	Building Other Worlds	4	2019	Dr. Mark Panning, InSight, Kepler, Soyuz rocket
Al-Ahmed, Sarah; Reitzel, David	All Space Considered November, 2018	4	2019	Giza, Draconis, Egypt
Rawlins, Dennis	Great Pyramid Alignment	5	2019	Maya astronomy and astrology, zodiac, Paris Codex, constellation
Usdi, Uguku; Calvillo, Evenly	Catch a Scorpion by the Tail	5	2019	Jezero crater, Dawn mission, Vesta, OSIRIS-REx mission
Al-Ahmed, Sarah; Reitzel, David	All Space Considered December, 2018	5	2019	All-American Transcontinental Total Solar Eclipse, Ulysees, Martin Kemp, Howard Russell Butler, artwork, paintings
Woo, Richard	Naked-eye Observations of the Corona Illusion during the 2017 Total Solar Eclipse	6	2019	Ultima Thule, New Horizons, Dr. Konstantin Batygin, Kuiper Belt, Planet Nine
Al-Ahmed, Sarah; Reitzel, David	All Space Considered January, 2019	6	2019	Apollo, space race, postage stamps
Jackson, Francine	To the Moon...but Not Back? The Cosmic Conundrum: Fermi's Paradox and the Search for Advanced Intelligent Life in the Universe	7	2019	Konstantin Tsiolkovsky, Carl Sagan, alien, DNA, SETI, SERENDIP, Galileo
Luna, Michael		8	2019	

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Al-Ahmend, Sarah; Reitzel, David	All Space Considered February, 2019	8	2019	Dr. Shamila Bhattacharya, genetics, Dr. Raja Guha Thakurta, DNA, RNA, galaxy cannibalism
	Chasing the Moon's Shadow, Again a sequel			
Monda, Richard	Son of a Totally Awesome Experience	9	2019	Total solar eclipse, Colorado
				Poland, Copernicus Science Center, planetarium, Krakow
Silverman, Julia	Heavens Copernicus	9	2019	Barnard's Star, American Astronomical Society (AAS), Gaia, Opportunity
Al-Ahmend, Sarah; Reitzel, David	All Space Considered March, 2019	9	2019	Nantucket, Walter Folger, Nantucket Whaling Museum, astronomical clock
Jackson, Francine	Folger's Clock	10	2019	InSight, Mars lander, Demo-1 SpaceX, Hayabusa2, OSIRIS-REx
Al-Ahmend, Sarah; Reitzel, David	All Space Considered April, 2019	10	2019	total solar eclipse, South America, Friends Of The Observatory, FOTO. condor, Galapagos
Krupp, E.C.	Dark and Chile	11	2109	film, movies, George W. Ritchey, Hollywood, Edwin P. Hubble, angel, Christmas
	Directed to the Stars: Frank Capra's Image for Heaven in It's a Wonderful Life			Leeward and Windward Islands, West Indies, alpha Centauri
Ross, David J.		12	2019	SpaceX, Starlink Initiative, Eric Whitacre, "Deep Field"
Frazier, Kendrick	Seeing the Southern Cross	12	2019	Cumulative index, list
Al-Ahmend, Sarah; Reitzel, David	All Space Considered June, 2019	12	2019	Apollo 11, 50th anniversary, Griffith Observatory special events
GO Staff	Griffith Observer 2019 Index	12	2019	Greek astronomer, parallax, mathematics, "Great Year"
Al-Ahmend, Sarah	Golden Moon	1	2020	Apollo 11 Saturn V rocket
Rawlins, Dennis	Aristarchos Appreciated	1	2020	Zeiss 12-inch refracting telescope, Griffith Observatory
Olander, Carol	Rocketing out of Washington	1	2020	Mercury transit
Hilgermann, Evan	A Telescope for Everyone	2	2020	Event Horizon Telescope project, black hole, exoplanets,
Krupp, E.C.	Dotting the Eye	2	2020	Astrobiology, alien life, molecular biology, atoms, exoplanets, water
Al-Ahmend, Sarah; Reitzel, David	All Space Considered July, 2019	2	2020	
Prud-homme, Genereux, Annie	Of What Are Aliens Made?	3	2020	
Al-Ahmend, Sarah; Reitzel, David	All Space Considered August, 2019	3	2020	Planetary Radio, LightSail 2, Local Void
Goldsmith, Donald	No Matter? Never Mind.	4	2020	Dark matter, cosmology, Dr. Fritz Zwicky, Dr. Vera Rubin, galaxies
Al-Ahmend, Sarah; Reitzel, David	All Space Considered September, 2019	4	2020	Dr. Eric Smith, James Webb Space Telescope, black hole
Krupp, E.C.	Astronomical Error	4	2020	Apology, astrophotography
Ventimiglia, Matt	Argentina's Pink Fairy Armadillo Eclipse	5	2020	South America
Al-Ahmend, Sarah; Reitzel, David	All Space Considered: October, 2021	5	2020	Mars, Chicxulub asteroid, dinosaurs
Rybcyzk, Daniel	Sixty Years of SETI	6	2020	Extraterrestrials, astrobiology, aliens
Krupp, E.C.	Going Viral	6	2020	COVID-19, coronavirus, closure
Al-Ahmend, Sarah; Reitzel, David	All Space Considered: November, 2019	6	2020	Chandra X-ray Center, Saturn's moons

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Prud'homme-Genereux, Annie	CubeSats: The People's Satellites	7	2020	Space exploration, AlbertaSat, spacecraft FOTO, Foundation, Griffith Observatory Foundation
Bedtke, Ann Marie	A Message from Friends Of The Observatory	7	2020	Mythology, popular culture, The Minor Planet Catalogue, Ceres, Pluto, Eris, IUA
Kozdon, Janus	Dwarf Planets: Rise, Fall, and Legacy	8	2020	FOTO, Friends Of The Observatory, Foundation, En Memoriam
Bedtke, Ann Marie	Honoring our Friends Angie and Tom Thornbury	8	2020	
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered: December, 2019</i>	8	2020	"The Halos and Environments of Nearby Galaxies", HERON, oxygen, Mars, Europa
Heckman, Thad	Mission to Palomar	9	2020	Observatory, observe
Bedtke, Ann Marie	FOTO Spotlight: Andre Bormanis: From Stargazer to Star Trek	9	2020	Griffith Observatory Foundation, member, Friends Of The Observatory
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered: January, 2020</i>	9	2020	<i>Spitzer Space Telescope, sun</i> Pop culture, Ladd Observatory, Cthullu, writer
Jackson, Francine	Lovecraft at Ladd	10	2020	
Nakamoto, David	The Comet That Refused to Die	10	2020	Comet Biela
Al-Ahmed, Sarah; Reitzel, David	<i>All Space Considered: February, 2020</i>	10	2020	W.M. Keck Telescope, Hawaii, Mauna Kea,
Bedtke, Ann Marie	FOTO Spotlight: A New Portal to Space	10	2020	Portal Pass, Friends Of The Observatory, Griffith Observatory Foundation, coronavirus
Winter, Frank H.	Asteroids: Foes or Friends? With Thy NEOWISE Dreams	11	2020	"starlike comet", IAU, NEO, near earth objects, mining
Krupp, E.C.	and Fables of the Sky	11	2020	
Bedtke, Ann Marie	Legacy Giving	11	2020	Comet NEOWISE
Leseman, Curtis	Eclipsing with Buddhas	12	2020	FOTO, Friends Of The Observatory, Griffith Observatory Foundation
Krupp, E.C.	Ringing in Another Eclipse	12	2020	Singapore, solar eclipse
	Deepen Your Personal Connection: Contribute to Friends Of The Observatory's			Solar eclipse
Bedtke, Ann-Marie	End-of-year Campaign	12	2020	
Ridden-Harper, Andrew	Another One Bites the Dust: Planets Facing Imminent Destruction	1	2021	FOTO, Griffith Observatory Foundation, membership
Friedrich, Liesel	David Allen Pierce: 28 October 1936 – 20 August 2020	1	2021	Exoplanets, Kepler, Kepler-152 b, dust
	A Light Touch and a Firm Hand on the Cosmos: Dr. David A. Pierce			Staff, astronomers, en memoriam
Krupp, Edwin	Year-in-review: Adaptation, Service, Astronomy	1	2021	
Bedtke, Ann Marie	Uninterrupted	1	2021	Staff, planetarium lecturer, en memoriam
Ventimiglia, Matt	A Contagion of Solitary Astronomy	2	2021	FOTO, Friends Of The Observatory, Griffith Observatory Foundation, memberships
Bohannan, Bruce	First, the Moon	2	2021	COVID-19, coronavirus, closure, comet NEOWISE, Mars opposition, Halloween Photography, John Herschel, spectroscopy, astrophotography

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Krupp, Edwin	The Cosmos Fights Back	2	2021	COVID-19, coronavirus, face masks, face coverings
Bedtke, Ann Marie	The Griffith Observatory Online School Program	2	2021	FOTO, Friends Of The Observatory, Foundation, membership, Griffith Observatory Foundation
Jackson, Francine	Transit Transactions and Planet Placement	3	2021	Mercury, Venus, Pierre Gassendi, John Flamsteed, Edmond Halley, William Lassell
	The Best Friend Griffith Park Ever Had: Tom LaBonge, 1953-			Councilmember Tom LaBonge, En memoriam, politician, Mount Hollywood Summit
Krupp, E.C.	2021	4	2021	
Krupp, E.C.	Come Together	4	2021	Jupiter, Saturn, conjunction
Bedtke, Ann Marie	From FOTO to Foundation	4	2021	Friends Of The Observatory, Griffith Observatory Foundation, membership
Sandler, Robert	Water Worlds	5	2021	Exoplanets, Percival Lowell, Mars, habitable zone, "Goldilocks" zone, Jupiter, moons, ice, Signs of Life
Laib, Chris	Arnold Seidel, Astronomically Committed	5	2021	FOTO, Friends Of The Observatory, Foundation, member
Keel, William	It's Never Aliens	6	2021	Astrobiology, SETI, Search for Extraterrestrial Intelligence, pulsars, radio-frequency, megastructures, artifacts
Lesemna, Curtis	Memories of Arecibo	6	2021	
Lewis, Briley	Finding Life in the Universe	7	2021	Observatory, Puerto Rico, radio telescope
	A Singular Reflection on Jai			Astrobiology, extraterrestrial life, aliens
Krupp, E.C.	Singh	7	2021	architecture, sculpture, Celestial Mirror, Barry Perlus
Krupp, E.C.	Michael Margolis: 1942-2021	7	2021	Museum Guide, staff, en memoriam
Prud'homme-Genereux, Annie	Neighborhood Watch versus Growth Charts: The Hubble Crisis	8	2021	Dr. Adam Riess, Dr. Charles Bennett, Hubble constant
Bohannan, Bruce	Photography, the Servant of Astronomy	9	2021	astrophotography, camera, William Herschel, collodion plates, dry plates
Krupp, E.C.	A Horse of a Different Color	9	2021	Lia Halloran, art, exhibit
Bedtke, Ann Marie	New Member Program	9	2021	Griffith Observatory Foundation
Krupp, E.C.	Curtains for the Moon	10	2021	lunar eclipse, umbra
Krupp, E.C.	Blue Blazes	10	2021	Lia Halloran, Your Body Is a Space That Sees, art, exnigit
Griffith, Griffith J.	Gifting Griffith Park	11	2021	donation, 125th anniversary,
Clarke, Charles G.	Griffith J. Griffith and His Park	11	2021	donation, 125th anniversary, reprint
Krupp, E.C.; Pine, Mark	Since the Centennial	11	2021	update, Griffith Observatory history
Fentress, Stephen	The Infrared Calls You	12	2021	light spectrum, microns, temperature, wavelengths
Ross, David J.	<i>Life's Questions</i>	12	2021	<i>It's a Wonderful Life, movie</i>
Bedtke, Ann Marie	Give the Gift of the Stars	12	2021	Griffith Observatory Foundation, donation, membership
Chakraborty, Srijita	The Pull behind Gravitation: Raychaudhuri and His Equation	1	2022	Biography, astrophysicist, black holes, singularity

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Briggs, John W.	Pie Town's Big Telescope	1	2022	Totoritis Observatory, 40-inch Dobsonian telescope
Krupp, E.C. Blancarte, Savannah	Stellar Acquisition  Edges of Infinity Comet Spotter, Professor, and Immortalized in Art: The Amazing Life of Maria Mitchell	1 2	2022 2022	Denera Circular Zodiac, Temple of Hathor, Egypt, constellations, calendar  expanding universe, big bang, cosmology
Grice, Noreen	Amazing Life of Maria Mitchell	3	2022	Biography, American astronomer, comet, Comet C/1847TI, "Miss Mitchell's Comet"
Franklin, Lloyd	Eclipse on Ice	3	2022	The Ice Cold Way Down South Total Solar Eclipse, Antarctica
Krupp, E.C.	Testing Total Eclipse Chicago, Waukegan, & Mackinaw City: A Bradbury Pilgrim on the Road to Partial Eclipse	4	2022	total lunar eclipse, Griffith Observatory livestream broadcasts
Ventimiglia, Matt	With Astronomical Gratitude -- Signs of Signs of Life	4 5	2022 2022	Ray Bradbury, author, annular eclipse Griffith Observatory Foundation, donation, membership Samuel Oschin Planetarium, show
Churchill, Christopher W.	Out of Ozma From Phantom to Phenomenon: The Discovery of Celestial Black Holes	5	2022	Frank Drake, SETI, search for extraterrestrial intelligence, the Drake equation, TESS, Transiting Exoplanet Survey Satellite
Luna, Michael --	The Key to Astronomy Supply Chain in an Accelerating Universe  The Tenth Annual Joan and Arnold Seidel <i>Griffith Observer</i> Science Writing Contest	6 6 7	2022 2022 2022	history, Isaac Newton, John Michell, James Clerk Maxwell, gravity, X-ray astronomy, 2022 radio astronomy  magazine price increase announcement contest winners
Biehle, Garrett	A Very Long Experiment How Astronomy Caught the	7	2022	Babylonian astronomers, Ptolemy,
Miller, John Lester Wong, Jennifer	Infrared Wave The Rabbit on the Moon	8 8	2022 2022	Hipparchus, planetary motion, planets light spectrum, temperature, wavelengths, William Herschel, infrared astronomy Chinese mythology, pareidolia
Jackson, Francine	Picturing the Moon The Ides of May Rising-in-eclipse Total Lunar Eclipse	9	2022	lunar photography, Daguerreotype process, Chinese space missions
Krupp, E.C.	Gravity, Black Holes, and Colliding Galaxies	9	2022	Griffith Observatory special events, total lunar eclipse
Duan, Jenny Ault, Allan and David Reitzel	All Space Considered: July, 2022 2021-2022 School Year Impact Report	10 10	2022 2022	cosmology, theory of relativity, string theory, event horizon general astronomy update
--	Wapakoneta, Ohio: An Unexpected Astronomical Convergence	10	2022	Griffith Observatory Foundation, Fifth Grade School Program
Elchert, Ken Ault, Allan	All Space Considered: August, 2022	11 11	2022 2022	Ohio, American history, Neil Armstrong, biography, Shawnee, Tecumseh, eclipse general astronomy update

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Bohannan, Bruce	Galileo Brown Ink and Griffith Observatory	12		Galileo's Telescope Extends the Eye 2022 exhibit, Griffith Observatory history, forgery
--	2022 Cumulative Index	12		2022 magazine index
Bedtke, Ann Marie	Give the Gift of the Stars	12		Griffith Observatory Foundation, 2022 membership, donation
Wong, Jennifer	The Landsat Nine	12		Landsat program anniversary, U.S. 2022 Geological survey