proselytize, lapsed into obscurity. He is reported to have died in Los Angeles sometime in the 1980s.

Sources:

Angelucci, Orfeo. *The Secret of the Saucers.* Amherst, WI: Amherst Press, 1955.

——. *Son of the Sun.* Los Angeles: DeVorss and Company, 1959.

——. "A Test for Veracity." *Saucers* 2,3 (September 1954): 10-11.

——. "Earth Turns a Somersault." *Saucers* 3,3 (September 1955): 6-7.

Davis, Isabel L. "Meet the Extraterrestrial." *Fantastic Universe* 8,5 (November 1957): 31-59.

Evans, Hilary. *Gods, Spirits, Cosmic Guardians: A Comparative Study of the Encounter Experience.* Wellingborough, Northamptonshire, England: The Aquarian Press, 1987.

Flammonde, Paris. *The Age of Flying Saucers: Notes on a Projected History of Unidentified Flying Objects.* New York: Hawthorn Books, 1971.

Fuller, Curtis. "The Men Who Ride in Saucers." *Fate* 7,5 (May 1954): 44-47.

"Interim Report on Answers to 'Contact' Questionnaire." *The U.F.O. Investigator* 1,2 (August/September 1957): 18-19.

Jung, C. G. *Flying Saucers: A Modern Myth of Things Seen in the Skies.* New York: Harcourt, Brace and Company, 1959.

Melton, J. Gordon, and George M. Eberhart, eds. *The Flying Saucer Contactee Movement: 1950-1990.* Santa Barbara, CA: Santa Barbara Centre for Humanistic Studies, 1990.

Nebel, Long John. *The Way Out World.* Englewood Cliffs, NJ: Prentice-Hall, 1961.

Norkin, Israel. *Saucer Diary.* New York: Pageant Press, 1957.

Plank, Robert. *The Emotional Significance of Imaginary Beings: A Study of the Interaction Between Psychopathology, Literature, and Reality in the Modern World.* Springfield, IL: Charles C. Thomas, Publisher, 1968.

Reeve, Bryant, and Helen Reeve. *Flying Saucer Pilgrimage.* Amherst, WI: Amherst Press, 1957.

Story, Ronald D., ed. *The Encyclopedia of UFOs.* Garden City, NY: Doubleday and Company, 1980.

ANOMALOUS AERIAL PHENOMENA BEFORE 1800

The history of anomalous aerial phenomena divides into three eras according to the prevailing concept of what could be mysterious in the sky. Most witnesses of strange flying objects from the late nineteenth century onward have reported technological devices, whether airships, phantom fliers, **foo fighters**, **ghost rockets**, flying saucers, or UFOs. Mechanical wonders have supplemented and, in part, supplanted the natural anomalies that rose to prominence in the eighteenth century and dominated reports in the nineteenth. In naturalistic terms the witnesses of unusual aerial objects saw peculiar meteors, auroras, electrical discharges, or some other freaks of astronomy and the atmosphere.

A supernatural conception dominated the descriptions of and explanations for aerial phenomena reported during the first and longest by far of these three eras. It stretches from earliest times until the eighteenth century without a rival and lingers on even today. Throughout this vast period people reported many appearances in the sky as strange and credited anything out of the ordinary with a supernatural origin. A strange sight could be a supernatural being or, more often, a message from such beings. In those days the heavens were telling the will of the gods. They sent their admonitions or warnings and prefigured future events, written in signs and wonders for all to see and fraught with deepest significance.

The understanding of nature during the supernatural era differed substantially from a modern understanding. The present world view separates the human and the natural realms. They interact in a machinelike relationship of cause and effect, but mind, morality, and society are unique to the human realm while nature consists of the amoral workings of mindless forces. The supernatural world view imposed no such distinction. Humans lived in a world that was either animate in its own right, a place where objects and forces partook of a life of their own, or alive through the agency of gods, spirits, and supernatural powers. The nonhuman realm was an anthropomorphic image of human individuals and society, while the two realms shared a universal mind, emotional sympathy, and moral obligation. Both realms

intermingled so closely that movements of the planets influenced human fate while weather or plant life reflected the good or evil in human actions.

A common cosmology of the supernatural era envisioned a tripartite universe. An upper or heavenly level belonged to the gods or powerful high spirits; the middle level was the earth and belonged to humans; the lower level or underworld belonged to the dead or lesser, often malevolent spirits. These levels were never far apart and intersected at some points, such as a mountain or cave. A sacred tree might have its roots in the underworld and its upper branches in heaven. Some spirits shared the earth itself, inhabiting every tree, rock, or stream and interacting with human beings on occasion. Normally invisible or imperceptible beings such as fairies might cohabit the earth in a sort of alternate universe but occasionally appear to mortals. Traffic to and fro between one level and another was also a common way for humans to meet supernatural beings. A vehicle was seldom required for these otherworldly visitors, but the supernatural world view allowed the gods to descend or the dead to arise and exercise influence on earth as a normal, even predictable state of affairs.

Contact between humans and the supernatural otherworld could take several forms:

Direct meeting. A common theme in mythology and such epics as Homer's *Iliad* or the *Ramayana* is the descent of gods to the earth, where they take a hand in human affairs by helping favored individuals or peoples and destroying their foes. Many legends tell of encounters with the creatures of lower mythology—people who see ghosts, meet fairies, or suffer the torments of demons. Sometimes humans turn the tables and visit the otherworld, as when Odysseus sailed to the end of the earth and entered Hades to talk with the dead, or an angel carried Mohammed to view heaven. A common tale among the American Indians described a hole in the sky through which humans passed between heaven and earth in a basket attached to a rope (Thompson, 1966). These meetings usually occur in a distant or indefinite past.

Visions. Visions are direct meetings in a nonphysical mode. St. Paul encountered Christ in a vision on the road to Damascus; then again he spoke of an ascent to paradise, "whether in the body or out of the body, I cannot tell: God knoweth" (2 Corinthians 12:2-4). Ezekiel's wheel was a visionary experience, while an extensive pseudepigraphical literature of journeys to heaven and hell developed during the intertestamental period; most such journeys were cast as visionary experiences. This tradition continued into the Christian era and culminated in Dante's *Divine Comedy* (Himmelfarb, 1983; Zaleski, 1987). The initiation of a Siberian shaman often took the form of a soul-journey, with the spirit entering the underworld to meet supernatural beings and gain magical powers while the body lay in a catatonic state (Eliade, 1974). A vision quest was necessary in the training of the Sioux medicine man and allowed him to learn wisdom from ancestral spirits (Neihardt, 1972).

Apparitions. A general name for any sort of visible supernatural manifestation, apparition usually refers to a sight that is definite in form and complex in composition, more substantial than visions but less than fully physical. The term today applies most often to appearances of the Virgin Mary, an elaborate type of manifestation that has occurred from medieval times to the present. These apparitions sometimes involved aerial events and usually included visionary encounters, physical traces, and prophetic messages (Christian, 1981). In the sixteenth and seventeenth centuries, apparitions of sky battles, angelic hosts, aerial ships, and symbolic events enacted in the clouds were commonplace and elaborate. Ghostly activity also took this title, if vivid and prolonged enough. Apparitions show themselves in contemporary time to living, ordinary individuals or groups of people who attest to the events and perhaps make depositions to the authorities.

Signs and wonders. This category encompasses miscellaneous appearances and events, related only because they were unusual enough to provoke wonder and regarded as supernatural messages. The ancient Romans classified these indications into several types: "Prodigy" was the most general term and covered any extraordinary manifestation sent by the divinities to reveal their will. A portent or sign was a divine indication given to the state or the people as a whole, while an omen admonished a particular individual. The appearance of a monster (*monstrum*), in the form of a strange animal, grotesque natural appearance, or

deformed birth, conveyed a warning and specifically indicated divine displeasure (Krauss, 1930). Christian writers adopted these terms, though in the seventeenth century a common collective term for seemingly meaningful events of extraordinary character was "divine providence," the intervention of God to warn or punish living humans.

At a time when close ties between the human and nonhuman realms were taken for granted, people accepted that great events left a mark on the present even before they happened. The foreknowledge of the gods or natural sympathies guaranteed some precursor as a sign, if only witnesses could recognize it. People therefore paid close attention to strange events as likely full of meaning for individuals and society. The more wonderful a sight, the more important its meaning and the more certain its supernatural origin. These events were the most topical anomalies, seen by many people but only momentary in interest.

Signs and wonders divide into terrestrial and celestial categories. Almost any event could convey an omen if so perceived. So ordinary an incident as a stumbling horse could presage an upcoming misfortune for the rider. Commonly mentioned terrestrial prodigies include odd animal behavior, moving statues, or children speaking from the womb. People readily attributed natural disasters such as earthquakes or lightning striking a church steeple to divine anger, and personal disasters to divine punishment. Signs such as weeping statues, rains of blood, or audible moans and cries in the night seemed laden with foreboding. The rains of fishes, black snows, and falls of unusual substances best remembered from the writings of **Charles Fort** attracted the interest of a long series of precursors who read supernatural messages in such events.

These categories aside, the most spectacular, most recorded, and most puzzled-over prodigies were the celestial anomalies. They divide into several types:

Validating signs. The skies proclaimed the uniqueness and importance of special individuals. A star might appear to announce the birth of a divine being, or a comet the death of a king. An extensive literature of saints' legends grew up in the Middle Ages, and these accounts included many signs of the sacredness of the saints. Lights from heaven shone down on the birthplace and grave of a saint, or angels flew overhead (Loomis, 1948).

Message signs. Reading the language of heavenly signs engaged an elite of experts throughout the supernatural era. Sometimes a prodigy simply indicated the will of the gods, positively in the case of the emperor Augustus when he saw a rainbow as a sign of approval, or negatively when an apparition of the executed Charles I hovered over Parliament. Admonitory signs cautioned against a present course of action, while warning signs gave evidence of the gods' displeasure and punishment to come. A misfortune might be diverted by the proper rituals. The institutionalization of reading and expiating prodigies among the Babylonian, Chinese, pagan Roman, and Christian priesthood attests to the seriousness with which these signs were taken as well as the care exercised in averting their consequences.

Portentous signs. All signs and wonders foretold the future to some degree, but certain manifestations gave a warning of things to come that anyone might read. Battles in the air, aerial swords, flying black coffins, and bloodlike appearances in the sky offered unambiguous forecasts of war, disease, and calamity to fearful observers. Traditional belief also preserved for the common people an understanding of many extraordinary events. Mysterious lights in Wales were known as corpse candles and similar lights regarded elsewhere as death omens, their appearance always followed soon after by a death in the community.

Wonders. A great many strange aerial events conveyed no obvious message, except to determined professional interpreters. Sights such as ships in the air might have no meaning beyond the wonder they inspired, or count as vaguely portentous at most. Then as now, an aerial event could become noteworthy for no more reason than its unfamiliarity.

A history of prodigy ideas and literature. The supernatural era presents considerable consistency from beginning to end in the types of anomalies recorded and the general interpretations given them. Sights that appeared to the Romans appeared as well in the Middle Ages and flourished throughout the age of the Reformation. The same natural phenomena awed ancient peoples worldwide. As a result an international similarity characterizes prodigies so that He-

brew, Babylonian, Chinese, Japanese, and Islamic accounts reflect ideas and sights little different from European records.

Astronomers of ancient Egypt and Mesopotamia watched the skies with diligence, and life in these early civilizations revolved around regular celestial motions. The Babylonians kept detailed records of normal heavenly movements as well as abnormal events, reading elaborate astrological interpretations into astronomical data. Prodigious events attracted enough interest for the Babylonians to compile a separate book of omens covering the period from about 1050 to 950 B.C. Most of the contents are concerned with animals or moving statues, though the book records a darkness in daylight and fire in the sky in an apparent reference to a solar eclipse. The ancient Egyptians were also careful astronomers but seemed less concerned with systematic record-keeping of strange events. Egyptian mythology includes a noteworthy story of a time when the sun god Ra lived on earth and ruled over humans. His subjects began to blaspheme and call him impotent, then set up an ambush for him as he sailed along the Nile. Ra's son Horus heard of this plot and assumed the form of a brilliant flying disc to attack the rebels. Ra did not allow all humans to be killed, but he left the earth and ever after sailed only the celestial Nile (Budge, 1912). Actual historical records are barren of all but an occasional omen.

How thoroughly we know the Egyptian records is uncertain. In 1953 the **Fortean Society**'s magazine *Doubt* (issue 41) published a translation by Boris de Rachewiltz of a report supposed to be from the annals of the reign of Pharaoh Thuthmosis III, ca. 1500 B.C. At the sixth hour of the day a soundless, foul-smelling circle of fire perhaps 50 meters in diameter crossed the sky, causing great consternation among witnesses. Some days later more of these objects appeared in sight of the king and his army, brighter than the sun, moving upward and to the south. Fishes and volatiles then fell from the sky, and the king ordered a purification ceremony. Fifteen years later, after publication of this story, its investigation was reopened by members of the University of Colorado UFO project (usually called the Condon Committee after its head, physicist Edward U. Condon). The manuscript once belonged to a Prof. Tulli, who had willed it to his brother, also deceased. The brother's heirs had dispersed the papyri as things of little value. Vatican sources indicated that Tulli was only an amateur Egyptologist and de Rachewiltz no better (though a real person, married to the daughter of poet Ezra Pound and an active Fortean). For these reasons and vague parallels between the account and the biblical passage concerning Ezekiel's wheel, the Condon writer suspected a hoax (Rosenberg, 1969). Hoax or not, the fact that irreplaceable manuscripts could disappear shakes any confidence that we know Egyptian history with suitable thoroughness.

Like the Mesopotamians, the ancient Chinese were systematic astronomers and astrologers. They kept extensive records and included them in the 26 official dynastic histories, leaving almost continuous coverage of astronomical events from about 100 B.C. onward and scattered accounts from earlier times. So accurate are these records that modern astronomers have used them to locate supernovae and calculate cometary orbits (Needham, 1959; Clark and Stephenson, 1979). For the Chinese, as for the Babylonians, events in the sky had meaning for events on earth, and such relationships were duly noted. Japanese records of strange phenomena are less systematic than the Chinese, but references to anomalous events appear as well in the Japanese historical literature.

Wherever ancient peoples made astronomical observations and left records of the work, a concern for anomalous phenomena is evident, and a fear that they portended momentous events is clear. The enlightened astronomers of the Islamic world worried about signs in the sky, and even the Mayan astronomers of Mesoamerica evolved similar beliefs independently of any contact with the Old World.

Of course our knowledge of observations and beliefs is most comprehensive for European history. The ancient Greeks paid close attention to oracles and divination, but the major historians—Herodotus, Thycydides, and Xenophon—made scant reference to prodigious events. Most Roman historians were much better disposed toward the uncanny. Livy's history of Rome is replete with detailed accounts of prodigies and their relationship to affairs of the city. Tacitus, Suetonius, Dio Cassius, and Ammianus Marcellinus likewise weave prodigious events into

the fabric of their narratives. Non-Roman historians in the Roman world such as Plutarch, Flavius Josephus, and Diodorus Siculus include anomalous phenomena as a matter of course. The New Testament combines Hebrew and Classical supernaturalism into vivid accounts such as the Star of Bethlehem and Saul's vision on the road to Damascus.

The Romans were of two minds about these events. Roman religion accorded prodigies a high status, treated them as matters of utmost concern, and carried out elaborate rituals of purification in the wake of even rather trivial appearances (MacBain, 1982). This official view was not universal, however. The Roman orator and statesman Cicero wrote a dialogue, *On Divination*, in which he expressed the skeptical attitude of an educated elite as he condemned the common willingness to see an omen in every trifle, accept evidence after the fact as proof for the validity of an omen, and believe that Jupiter would communicate his will through such commonplaces as the cackling of chickens. Yet a pervasive faith in prodigies persisted among the literate and presumably thrived among the common people. As the Roman Empire declined, a concern with supernatural matters seemed to increase. An obscure fourth-century writer named Julius Obsequens culled the prodigious events from Livy's history and compiled them into a separate book, a demonstration that such happenings had become matters of independent interest.

The Middle Ages began with the fall of the Roman Empire in the fifth century. Christianity triumphed, barbarian hordes swept through Europe, central authority collapsed, and feudalism became the predominant social system. Most of the learning of Classical antiquity disappeared from the continent, and the period from the fifth through the eleventh centuries has been called the Dark Ages. These social upheavals brought few changes in the concept or appearance of prodigies. Christian fathers such as Augustine and Orosius adopted them as valid happenings and forerunners of the end of the world but drew them into the larger theological context of miracles. Miracles were real, of course, attested to in the Bible, but mostly things of the past. Present-day events were seldom genuinely miraculous but a part of God's natural order not understood by human beings, or else the work of demonic powers. If interpretation acquired a Christian flavor, the sights remained the same. Aerial crosses became commonplace, and angels replaced flying gods, but pagan prodigies continued largely unchanged in a Christian world.

Monastic writers recorded the history of this era in the form of chronicles, lists of significant events in chronological order with little interpretation or commentary. This form was ideal for preserving anomalies, and references to strange sights in the sky often turn up side by side with deeds of the king or entries about wars and crusades. The most detailed chronicles originated during the high Middle Ages of the twelfth and thirteenth centuries, when writers such as Matthew Paris and Roger of Wendover compiled national histories for Britain going back to its mythological origins. Latin was the universal language of Western Europe, Greek of the Byzantine East. Some chronicles were written in the vernacular, such as the *Annals of the Four Masters* in Ireland, the *Anglo-Saxon Chronicles* in Britain, and the Nestor chronicle in Russia. Most historical documents of whatever language contain many references to prodigies and confirm their universal appeal.

Wracked by war, plague, and religious uncertainty, the late Middle Ages of the fourteenth and fifteenth centuries provided fertile ground for supernatural belief. Marian apparitions grew in number, fears of witchcraft intensified, and apocalyptic expectations lent new urgency to signs in the sky. Europe was approaching a great historical turning point, the Protestant Reformation. The sixteenth and seventeenth centuries brought reformation and counter-reformation, inquisitions, witchcraft epidemics, and religious wars. This period also gave rise to the most intensive interest in aerial wonders before modern times.

Two factors helped make the Reformation a golden age for prodigies. One was the widespread religious ferment that upset old certitudes and disrupted the peace of Europe. In fearful and uncertain times, any manifestation of possibly supernatural origin held keen interest. Leading religious figures such as Martin Luther reaffirmed that signs must precede the end of the world, and Puritan belief fostered keen

awareness of the supernatural by emphasizing a daily struggle between God and Satan in the worldly arena. The second factor was the printing press, introduced in the fifteenth century and widespread by the beginning of the sixteenth. Printing made possible the dissemination of topical news at an unprecedented rate and replacement of learned languages with the vernacular. A sizable fraction of the European public was literate in its native language and eager to read sensational reports of strange events. Publishers were equally eager to satisfy this demand.

Rediscovery and publication of the prodigy book of Obsequens in 1508 initiated a flood of similar works. The most comprehensive was the *Prodigiorum ac Ostenstorum Chronicon*, which appeared in 1557 at Basel. Its author, Conrad Lycosthenes, intended to improve on Obsequens by listing every prodigy that had appeared from the beginning of the world to the present. He searched the Bible, ancient histories, medieval chronicles, and recent sources to compile a huge collection of wonderful events. When the English cleric Stephen Bateman translated Lycosthenes into English in 1581, he entered into the spirit of the project by updating the chronicle and adding prodigies from sources unavailable to his Alsatian predecessor. Bateman took seriously the apocalyptic mission of prodigies and gave his book the alarming title *The Doome Warning All Men to the Judgment.*

Book-length collections were published in Germany by Johann Wolf and Johannes Praetorius, in France by Pierre Boaistuau and Simon Goulart. English-language books included E. Fenton's *Certaine Secrete Wonders of Nature* (1559), John Vicars's *Prodigies and Apparitions, or England's Warning-Pieces* (1642), John Gadbury's *Natura Prodigiorum* (1660), Nathaniel Crouch's *Admirable Curiosities, Rarities and Wonders* (1682) and *The Surprizing Miracles of Nature and Art* (1683). From America the Puritan minister Increase Mather published *An Essay for the Recording of Illustrious Providences* (1684), and his witch-hunting son, Cotton, the *Magnalia Christi Americana* (1702). Interest in prodigies supported shorter works such as *Strange News, or the Historie of Strange Wonders* (1561), *Looke Up and See Wonders* (1628), and L. Brinckman's *The Warnings of Germany* (1638), a list of the dire portents that accompanied the Thirty Years' War. Most common of all were innumerable pamphlets a few pages long proclaiming "Strange News" to readers.

One of the most noteworthy English collections was titled *Mirabilis Annus, or the Year of Prodigies and Wonders.* It appeared in three installments during 1661 and 1662. The Protestant theologian John Calvin had said that miracles occurred every day. His intention was to downplay the importance of such events and turn popular interest away from them, but his words had just the opposite effect on the anonymous author of *Mirabilis Annus.* This writer set out to prove that Calvin's words were quite literally true, and prodigious events of the air, land, and sea were indeed almost daily occurrences. Some of his instances showed in a heavy-handed way that God favored the Puritan cause against the Royalists. A furor arose as the government accused the author of fabricating his prodigies for political ends and tried without success to discovery his identity (Thomas, 1971).

This literature reflected the learned side of beliefs about anomalous aerial phenomena, but along with it existed the beliefs of the common people. Systematic efforts to collect folklore began only in the nineteenth century, so we cannot know for certain how popular belief compared to learned belief during the era when supernatural ideas predominated. At the same time we have good reason to think that age-old beliefs persisted in folklore until this century. Medieval chroniclers such as Giraldus Cambrensis and Gervase of Tilbury sometimes referred to fairies or ghostly manifestations little different from later folklore, and Reformation-era authors included many folk motifs in writings on ghosts and witchcraft. A few authors, among them John Aubrey, author of *Miscellanies* (1721), were early folklorists who collected popular beliefs like those found later. The luminous phenomena associated with fairies, ghosts, and death omens in recent times seem largely unchanged for hundreds, perhaps thousands, of years.

If the supernatural era was a time of credulity, it was also a time with a persistent undercurrent of scientific understanding. The earliest astronomers recognized the basic regularity of the heavens, and scholars of the high Middle Ages regarded even irregular phenomena like comets and meteors as natural. One

sense of the prodigious was an event counter to nature. Although this idea reflected popular understanding, ancient philosophers and Christian theologians committed themselves too strongly on certain first principles to tolerate capricious violations. For the Classical philosophers the principle was a universal regularity of nature; for the theologians, God's creation of a perfect natural order. Ptolemy explained that comets resulted from an overabundance of the element of fire in the upper atmosphere. This excess of celestial fire then heated the human spirit to a greater lust for war. Augustine explained the apparition of an aerial battle as the work of demons as they tried to fire up a similar lust. The Christian scholars adopted Classical theories of nature and set God above it as its creator and controller, but seldom as a meddler.

The effort to reconcile a strong belief in the communicative value of anomalies with theoretical systems that opposed this role led to the concept of dual causality. Such events were both natural and supernatural. Prodigies were natural phenomena like any other and in no sense a violation of nature, but they also related to earthly events. This relationship could be causative, indicative, or merely associative. Few writers accorded prodigies the causal role that Ptolemy gave them but granted that God might signal a warning out of foreknowledge of human events to come, by making use of natural processes in an unusual way. Many authors attempted to link a prodigy with the events it supposedly indicated, but this tie attenuated over time as strange events became simply associative, the sort of happening that occurred along with other events worthy of mention but unconnected with them. By 1697, when William Turner published his *Complete History of the Most Remarkable Providences*, prodigies had become generalized into any sort of remarkable event. Turner included feats of human engineering alongside strange sights in the sky as proof of God's providence. The popular idea of some foreboding relationship between aerial prodigies and terrestrial events persisted, but the supernatural side of dual causation was well on the wane by the late seventeenth century.

A natural interpretation for aerial events found advocates among the rising community of scientific rationalists. The English writers Polydore Vergil and John Spencer followed Cicero and argued against the reality of supernatural manifestations, while Edmund Halley's determination that the comet now bearing his name followed a regular orbit drew these most dreaded of prodigies fully into the natural sphere. The founding of organizations such as the Royal Society in the mid-seventeenth century opened a new forum for the rationalistic study of aerial events. By 1700 the supernatural world view was coming to an end, and the first great age of "UFO" beliefs was in transition.

Of course these changes did not occur overnight. Popular belief maintained supernatural ideas little touched by the new currents of science. Enclaves of Puritan thought preserved a faith in prodigies throughout the eighteenth century, just as religious sects would keep supernatural aerial anomalies alive into this century. A few echoes of seventeenth-century descriptions and ideas turned up in eighteenth-century periodicals such as the *Annual Register* and *Gentleman's Magazine*, but they more often recorded meteors and similar phenomena as strictly natural events.

No sooner were supernatural anomalies laid to rest than science began to gather a few skeletons in its own closet. The more scientists understood about astronomical and meteorological phenomena, the more clearly they recognized that an occasional report failed to fit the established paradigm. Meteors themselves no longer carried a divine message, but a misbehaving meteor portended dire consequences for scientific theory. Sometimes the theory changed to adapt to the phenomenon, as when meteorites became accepted as stones that fell from the sky during the late eighteenth and early nineteenth centuries. Sometimes scientists ignored the anomalous event and left a growing "procession of the damned" for Charles Fort to gather. After 1800 most strange sights in the sky have had only natural or artificial connotations.

Representative observations of aerial anomalies from the supernatural era. Most pre-1800 reports describe now-familiar astronomical or meteorological phenomena, with nothing strange about them but the terminology and metaphors used.

Comets. England, January 729: "There appeared about

the sun two terrible stars; one of which went before the rising sun, the other followed him when he set, as it were presaging destruction to the east and west.... They extended their fiery tails to the northwest, and ... continued nearly fifteen days" (Roger of Wendover, 1849). England, February 16, 1106: "A strange star appeared in the evening, and for a long time after that was seen each evening shining for a while. The star appeared in the southwest–it seemed small and dark, but the light that came from it was very bright and appeared like an immense beam shining northeast; and one evening it seemed as if the beam were flashing back toward the star" (*Peterborough Chronicle*, 1971). China, July 31, 1506: "A star was seen to the west.... It resembled a great ball. Its color was a bluish white. After some days it had a small tail.... It gradually lengthened, and appeared like a broom" (Williams, 1871). Persia, 1617-18: One of several signs "was a slanting shaft of light, shaped like a sword, which was visible in the east nearly every morning; its tail pointed southward" (Monshi, 1978).

Meteors. Rome, 91 B.C.: "About sunrise a ball of fire flashed forth from the northern heavens with a great noise in the sky" (Obsequens, 1959). England, A.D. 555: "There was seen the appearance of lances in the northwest quarter of the heavens" (Roger of Wendover, 1849). France, December 584: "A great beacon traversed the heavens, lighting up the land far and wide some time before the day dawned" (Gregory of Tours, 1977). Japan, 637: "A great star floated from east to west, and there was a noise like that of thunder" (*Nihongi*, 1956). Annam (Vietnam), May 22, 1618: In the early evening "a star moved swiftly westward, like a roll of cloth" (Ho, 1964).

Auroral phenomena. 93 B.C.: "At Volsinii flame seemed to flash from the sky at dawn; after it had gathered together, the flame displayed a dark gray opening, and the sky seemed to divide; in the gap tongues of flame appeared" (Obsequens, 1959). Possibly a beam or halo phenomenon. Rome, 42 B.C.: "Light shone so brightly at night that people got up to begin work as though day had dawned" (Obsequens, *op. cit.*). France, December 584: "Rays of light shone in the sky, and in the north a column of fire was seen to hang from on high for a space of two hours, with an immense star perched on top of it" (Gregory of Tours, 1977). England, December 7, 1122: "There were many sailors ... who said that they saw near the earth in the northeast a great and broad fire which grew in length up to the sky, and the sky divided into four parts and fought against it as if it were bound to extinguish it, and the fire then stopped growing upward toward the heavens. They saw that fire at daybreak, and it lasted until it was light everywhere" (*Peterborough Chronicle, op. cit.*).

Parhelia, atmospheric halos. 122 B.C.: "In Gaul three suns and three moons were seen" (Obsequens, *op. cit.*). Hereford and Worcester, England, April 8, 1233: "There appeared four spurious suns around the real sun, of different colors, some of a semicircular form and others round. These suns ... were seen by more than a thousand creditable persons" (Roger of Wendover, *op. cit.*).

Phenomena of unusual character and less certain identity. Japan, 682: "A thing appeared in shape like a Buddhist baptismal flag, and of a flame color. It floated through the void towards the north and was seen by all the provinces. Some said that it sank into the Sea of Koshi" (*Nihongi, op. cit.*). England, 1171: "A great dragon ... flew through the air not far from the ground, and in his flight raised a great fire in the air which burnt a house to ashes, with all that was about it" (*Genealogies of the Kings of England*, 1865). Belloacum, 1194: "Ravens ... of huge greatness flying in the air from place to place, were seen to carry in their bills quick and burning coals, with which they set houses on fire" (Bateman, 1581). This legend of ordinary or monstrous birds carrying fire is included in Pliny, Dio Cassius, and Obsequens and appears in a number of medieval accounts. Craconia, Poland, December 1, 1269: "In the twilight, a strange and a notable brightness shaped like a cross, gave light down, not only upon the city, but upon all of the country about" (*ibid.*). France, January 13, 1537: "A star of wonderful greatness was seen in the element, which by little and little spreading into the air took the form of a whitish circle, whereof afterward through a great violence of the wind flames were rained upon the earth and did burn only those things which otherwise are not commonly consumed with devouring flames...." (*ibid.*).

Wildfire. This curious phenomenon recurs from medieval to recent times. The term may refer to runaway brush fires, and it was a synonym for gunpowder in

Elizabethan times, but the word indicated something unusual as well. England, 1032: "In this year appeared the wildfire, such as no man before remembered; and moreover it did harm in many places. 1049.... and the wildfire also did much evil in Derbyshire and elsewhere. 1078. And in this year was the dry summer, and wildfire came in many shires, and burned many towns; and also many burghs were burnt" (*Anglo-Saxon Chronicle*, 1964). 1048: "The wild fire which none did understand, killed many men and animals all over England.... There came fires in the air, commonly called 'woodland fires,' which destroyed towns, standing corn in the field, in Derby and other counties" (Florence of Worcester, 1854). "Many districts ... were visited with a mortality, among men and cattle; and a fire in the air, commonly called wild-fire, burnt many vills and corn fields" (Roger of Wendover, *op. cit.*). Northumberland, England, May 1067: "Many folk saw a sign/ In likeness of fire it was,/ In the air it greatly flamed and burned:/ Towards the earth it approached,/ For a little it quite lighted up./ Then it revolved up above,/ Then fell into the deep sea./ In many places it burnt woods and plains" (Gaimar, 1968). An even more severe outbreak began late in 1693 and continued into 1694. A writer called attention to the "unaccountable firing of sixteen ricks of hay, and two barns.... [T]hey were not burned by common fire, but by a kindled exhalation which was often seen to come from the sea.... Such as have seen the fire, say 'twas a weak blue flame, easily extinguished.... (Camden, 1695). John Evelyn writes in his diary (April 22, 1694) of a "fiery exhalation rising out of the sea in Montgomeryshire, which spread itself a furlong broad and traveled many miles in length; burning all straw, hay, thatch, grass, but doing no harm to trees ... leaving such a taint on the grass, as killed all the cattle that ate of it" (Evelyn, 1955). On October 5, 1877, a letter appeared in the *London Times* discussing mysterious lights of various colors on the coast of Wales in 1875 and 1877. These lights "have frequently been seen moving over the estuary of the Dysynni river and out at sea." They moved quickly for miles and suddenly disappeared. Even as late as 1953 mysterious fires occurred in the same area (Wilkins, 1954).

Apparitional phenomena. These events make up much of the prodigy literature. Some of them are simple but often become complex epics by Reformation times, spectacular to read but too incredible to believe, consisting of far more imagination than accurate observation. 214 B.C.: "At Hadria an altar appeared in the sky with men in white robes standing around it" (Livy, 1972). 104 B.C.: "At Ariminum ... weapons in the sky seemed to join in battle ... from east and west; those from the west appeared to suffer defeat" (Obsequens, *op. cit.*). Jerusalem, A.D. 70: "Before sunset there were seen in the sky over the whole country, chariots and regiments in arms speeding through the clouds and encircling the towns" (Josephus, 1976). Japan, 643: "Five colored banners and umbrellas shone in the sky, and descending, hung over the Temple to the sound of various music.... At length they were pointed out to Iruka, upon which the banners and umbrellas were changed into a black cloud, so that Iruka was unable to see them" (*Nihongi*, *op. cit.*). Dunstable, England, 1188: "The heavens opened, and, in the sight of many ... a cross appeared, very long and of wonderful magnitude, and it appeared as though Jesus Christ was fastened thereon with nails, and crowned with thorns; His hands also were stretched out on the cross, and the wounds of His hands, and feet, and sides were bloody, and His blood was flowing down but did not fall upon the earth. This appearance lasted from the ninth hour of the day till twilight" (*Annals of Roger de Hovenden*, 1853). 1532: "In many countries there were seen dragons flying in the air in flocks covered with crowns, and having pigs' snouts" (Bateman, *op. cit.*). This account is reminiscent of reports of **flying serpents** which continued even into the early years of the twentieth century. Gierstedt, Anhalt (Germany), May 12, 1624: "A strange prodigy in the heaven ... continued from 6 till 8 o'clock at night.... First of all came forth out of the clouds an ancient, with a red Hungarian habit; after him followed some grave men clothed in the like habit. Thirdly, came forth a chariot with two horses of divers sprinkled colors, and another chariot with four armed horses. Suddenly did break out of the clouds in infinite number of people, like a swarm of bees, with such aforesaid Hungarian habit, and with Hungarian hats upon their heads with great feathers. After them followed a man seated upon horseback, with a great long robe, parting the people before him. After this did follow a comet ... with inclining head. A quarter of an hour after came

forth another army, consisting of many horses and foot, and chariots.... In the midst of the army appeared a man alone, drawing before him a long red cross." One army then routed and defeated the other, afterwards marching away and vanishing amid red clouds (Brinckmair, 1638). October 17, 1660: "At Shenly in Hertfordshire ... was seen in the air towards the evening ... the appearance of five naked men exceeding bright and glorious, moving very swiftly" (*Mirabilis Annus*, 1661–62). This appearance corresponded with the execution of three Puritan leaders and constituted one of the political "prodigies" in this work.

Aerial phenomena associated with rulers, heroes, and great events. 343 B.C.: The Greek commander Timoleon set sail from Corinth to Sicily. "[W]hen he was now entered into the deep by night ... the heavens seemed all on a sudden to break open, and a bright spreading flame to issue forth from it, and hover over the ship he was in; and, having formed itself into a torch ... it began to steer the same course ... guiding them by its light" (Plutarch, 1977). Rome, A.D. 193: After the assassination of the emperor Pertinax, three men contended for the throne. "These were the three persons darkly indicated by the three stars that suddenly came into view surrounding the sun.... These heavenly bodies were so very brilliant that the soldiers kept continually looking up at them and pointing them out to one another, declaring moreover that some dreadful fate would befall the usurper" (Dio Cassius, 1905). England, ca. 500: Geoffrey of Monmouth wrote around 1136 of a cometlike sign foretelling the birth of King Arthur: "There appeared a star of great magnitude and brilliance, with a single beam shining from it. At the end of this beam was a ball of fire, spread out in the shape of a dragon. From the dragon's mouth stretched forth two rays of light" (Geoffrey of Monmouth, 1966). England, 1239: "Before the birth of [Edward I], there appeared early in the morning certain days together before the sun was up, a star of a large compass, the which with swift course was carried through a long circuit of the air, sometimes shewing as it had borne fire with it, and sometimes leaving as it were smoke behind it, so that it was after judged, that the great deeds which were to be achieved by ... Edward, were by this wonderful constellation foreshadowed and signified" (Holinshed, 1808). Constantinople, May 29, 1453: "Every night [during the siege by the Turks] a fire descended from the sky, stood over the City, and enveloped her with light all night long." At first the Christians read this light as a sign of God's wrath and the coming destruction of the city, but initial successes against the Turks led to the reinterpretation that God had sided with the Christians and that they would prevail. "Thus the sultan and his entire retinue became visibly depressed ... and were considering lifting the siege.... On the night before their scheduled departure the heavenly sign descended in its customary manner but did not envelop our City as it had before.... [N]ow it seemed to be far away, then scattered quickly, and vanished at once. The sultan and his court were immediately filled with joy" (Melissinos, 1980).

Aerial phenomena associated with gods and saints. Some of the most spectacular phenomena belong to this category, also some of the least reliable. Written sometimes centuries after the event, these reports reflect more a tradition of supernatural beliefs than genuine events. 1250 B.C.(?): "And the Lord went before them by day in a pillar of a cloud, to lead them the way; and by night in a pillar of fire, to give them light; to go by day and night: He took not away the pillar of the cloud by day, nor the pillar of fire by night, from before the people" (Exodus 13:21-22). ca. 4 B.C.: "Behold, there came wise men from the east to Jerusalem, saying, Where is he that is born King of the Jews? for we have seen his star in the east.... Lo, the star ... went before them, till it came and stood over where the young child was" (Matthew 2:1-2,9). ca. A.D. 30: "And when he had spoken these things, while they beheld, he was taken up; and a cloud received him out of their sight" (Acts 1:9). Ireland, ca. 520: A priest, "upon returning home from the church after mass, found his house illuminated with a bright light, and saw in fact a ball of fire standing over the face of the little boy [St. Columba] as he lay asleep" (*Life of St. Columba*, 1874). Scotland, 579: "On the night when St. Columba ... passed from earth to heaven, while I and others with me were engaged in fishing ... we saw the whole vault of heaven become suddenly illuminated. Struck by the suddenness of the miracle, we raised our eyes and looked towards the east, when, lo! there appeared something like an immense pillar of fire, which seemed to us, as it

ascended upwards at that midnight, to illuminate the whole earth like the summer sun at noon; and after that column penetrated the heavens darkness followed, as if the sun had just set.... [M]any other fishermen ... were greatly terrified ... by an appearance of the same kind" (*ibid.*). Barking, England, ca. 673: During a plague, the sisters in a nunnery were uncertain of where they should be buried. They "received a very clear indication of the wishes of heaven. For one night ... a light from heaven like a great sheet suddenly appeared and shone over them all, so alarming them that they even broke off their singing in consternation. After a while this brilliant light ... rose and traveled to the south side of the convent ... and, having remained over that area for a time, withdrew heavenwards in the sight of them all.... So brilliant was this light ... that the rays ... penetrating the chinks of doors and windows seemed brighter than the brightest daylight" (Bede, 1970). Russia, February 11, 1110: "A fiery pillar appeared, which reached from earth to heaven; lightnings illuminated the whole countryside, and thunder was heard in the sky at the first hour of the night. The whole populace beheld the miracle. The pillar first stood over the stone refectory [of the Crypt Monastery], so that its cross could not be seen. Then it moved a little, reached the church, and halted over the tomb of Theodosius. Then it rose, as if facing to the eastward, and forthwith became invisible" (Nestor, 1930). Ireland, February 17, 1173: On the night the bishop of all northern Ireland died, "the night was illumined from nocturns until cockcrow, and the ground was all in flames; and a large mass of fire ascended over the town, and proceeded towards the southeast; and all persons arose from their beds, imagining that it was day" (*Annals of Loch Ce*, 1965).

Around 1620 Francisco de Moncada wrote a history of Spanish participation in a Crusade some 300 years earlier. He added this legend associated with the New Testament St. John: "They say that the tomb of Saint John is in this city of Ephesus.... Shortly after his funeral, a great cloud that looked like fire rose over the place. The people believed that his body was carried off in it, because they could not find it afterwards" (Moncada, 1975).

Miraculous aerial events surrounding the birth and death of a sacred being are by no means limited to the Western world. The Indian *Mahabarata* epic describes the death of Krishna as follows: "A resplendent light arose from the form of Krishna, which diffused its lustre through the whole space from earth to heaven; and ... the now expiring hero was attended by [a long list of angel-like spirits], who now hastened to conduct the soul of Krishna to the abodes of the blessed. It is added, that the same light which shone over the house of his father Basdeu at the period of his birth, was that which now illustrated the departure of Krishna, with whom it disappeared from the earth" ("The Last Days of Krishna," 1831).

The following four categories of phenomena are taken from folkloric accounts:

Death-omen lights. New England, ca. 1680: The Indians "have a remarkable observation of a flame that appears before the death of an Indian or English upon their wigwams in the dead of night; I was called out once about twelve a clock ... and plainly perceived it mounting into the air over a church.... You may certainly expect a dead corpse in two or three days" (Crouch, 1685). (In Wales small floating lights called corpse candles preceded death in the village and followed the course of the funeral, one candle for each of the deceased. These lights are discussed in Richard Baxter's *Certainty of the Worlds of Spirits* [1691] and John Aubrey's *Miscellanies* [1721].) In *Cambrian Superstitions* (1831) W. Howells writes that in the eighteenth century "three corpse candles were observed on the surface of the water, gliding down the stream which runs near the road ... and it is related that a few days after, some men were crossing the river near there in a coracle ... and when about in the middle of the river ... their frail conveyance sank ... and they were drowned."

Supernatural beings, ghosts, witches, Will-o'-the-Wisp. China, ca. 140 B.C.: "Duke Wen came into possession of some stonelike objects which he placed in a shrine.... The spirits of the objects sometimes would not appear for a whole year, while at other times they would come several times in the year. They always appeared at night, shedding a brilliant light like shooting stars, coming from the southeast, and gathering on the wall of the shrine. They looked like roosters and made a screeching sound" (Ssu-ma Chi'en, 1961). Leicestershire and Northamptonshire, England, November/

December 1394: "A certain thing appeared in the likeness of fire in many parts of ... England ... every night. This fiery apparition, oftentimes when anybody went alone, it would go with him, and would stand still when he stood still. To some it appeared in the likeness of a turning wheel burning; to othersome round in the likeness of a barrel, flashing out flames of fire at the head; to others in the likeness of a long burning lance ... and when many went together, it approached not near them, but appeared to them as it were afar off" (Holinshed, 1808). Massachusetts, January 18, 1644: "About midnight three men, coming in a boat to Boston, saw two lights arise out of the water ... in form like a man, and went a small distance to the town ... and there vanished away. They saw them about a quarter of an hour.... A week after the like was seen again. A light like the moon arose about the N.E. point in Boston, and met the former at Nottles Island, and there they closed in one, and then parted, and closed and parted divers times, and so went over the hill in the island and vanished. Sometimes they shot out flames and sometimes sparkles. This was about eight of the clock in the evening, and was seen by many." About the same time a voice was heard calling, "Boy, boy, come away, come away," and the appearances occurred near where a ship had blown up not long before (Winthrop, 1959). Japan, 1686: After the death of a greedy man, "every night a fiery ball flew from his village to the temple on the top of Hieizan, and more particularly to a spot, where many oil-lights were burning. The people were very afraid of it and called it the 'oil-thief,' as they supposed it to be the bad steward's soul, filled with an ardent desire for the oil. Young men would hit it with arrows and bullets, but when it appeared above their heads, in the shape of a dark cloud with a light in the center, they dropped their bows and guns for fear. One of them, who ventured to look at the apparition, saw a furious human head, blowing fire out of its mouth" (Visser, 1914). Salem, Massachusetts, ca. 1692: "John Pressy testified, that being one evening very unaccountably bewildered ... and several times, as one under an enchantment, returning to the place he had left, at length he saw a marvellous light, about the bigness of a half-bushel, near two rod out of the way. He went, and struck at it with a stick.... He gave it near forty blows; and felt it a palpable substance. But going from it, his heels were struck up, and he was laid with his back on the ground.... Having, after his recovery, gone five or six rod, he saw Susanna Martin standing on his left-hand, as the light had done before.... He could scarce find his house in his return; but at length he got home, extremely affrighted. The next day ... Martin was in a miserable condition by pains and hurts that were upon her" (Mather, 1914).

The Wild Hunt. Accounts of a furious supernatural host or hunting party rushing through the air, sometimes accompanied by lights, are common in the folklore of northern Europe. The earliest mention may trace back as far as the Roman writer Agricola's *Germania*, and several similar reports appear in medieval chronicles. A bright light seen in the air over western Germany in the 1850s was called the "Devil's Army," probably a synonym for the Wild Hunt, and in 1897 some German immigrants in Iowa remembered this appearance in connection with the headlights that figured in phantom **airship sightings** then being reported. An example collected in the nineteenth century tells of two men stealing wood just after the death of a local count: "But scarcely had they filled the wagon when they heard hounds baying and horn calls; through the air over the trees went the Wild Hunt, black dogs with fiery eyes in front, then on a black, fire-snorting horse the dead count sounded a hunting-horn, from the mouth of which a long fiery tail flowed to the place where [the men] stood" (Erich Pohl, 1975).

Fairies. Fairylore is rich with parallels to UFO phenomena, whether small flying lights attributed to fairies or visits to fairyland with similarities to UFO-abduction reports. The fairy tradition was active in medieval times and occasionally found its way into chronicles, though most collections of these accounts date from more recent times. Isle of Man: "One October night, I and another young man were going to a kind of Manx harvest-home.... I looked across the river and saw a circle of supernatural light.... The spot where the light appeared was a flat space ... and into this space and the circle of light ... I saw come in twos and threes a great crowd of little beings smaller than Tom Thumb and his wife.... They moved back and forth amid the circle of light, and they formed in order like troops drilling" (Evans-Wentz, 1973). Flakkebjaerg, Sweden: "A peasant ... was riding home ... one evening, and on approaching [the prehistoric

burial mound called] Barnet he saw the whole mound standing on four glowing pillars, while on drawing nearer he could see a crowd of little creatures dancing merrily beneath it" (Craigie, 1896). England: A man returning home one evening "suddenly perceived before him ... a large company of fairies intensely engaged in their favorite diversions. He drew near unobserved, and presently descried a stee [ladder] reaching from them up into a cloud. But no sooner was the presence of a mortal discovered than all made a hasty retreat up the stee. Jack rushed forward ... but arrived too late. They had effected their retreat, and quickly drawing up the stee, they shut the cloud and disappeared" (Newman and Wilson, 1952).

The reports below refer more or less explicitly to aerial constructions of various kinds:

Aerial vehicles. ca. 911 B.C.: "And it came to pass, as [Elijah and Elisha] still went on, and talked, that, behold, there appeared a chariot of fire, and horses of fire, that parted them both asunder; and Elijah went up by a whirlwind into heaven" (II Kings 2:11). 614 B.C.: Ezekiel's vision began while he was by the river Chebar with a group of captives, when "behold, a whirlwind came out of the north, a great cloud, and a fire infolding itself.... Also out of the midst thereof came the likeness of four living creatures. And this was their appearance; they had the likeness of a man. And every one had four faces, and every one had four wings ... and they sparkled like the color of burnished brass.... Now as I beheld the living creatures, behold one wheel upon the earth by the living creatures.... The appearance of the wheels and their work was like unto the color of a beryl: and they four had one likeness: and their appearance and their work was as it were a wheel in the middle of a wheel. When they went, they went upon their four sides: and they turned not when they went" (Ezekiel 1:4-17). ca. 200 B.C.-A.D. 200: The Indian *Ramayana* epic was written at this time, though the mythical events described may belong to a far more ancient time. In it we find this account: "Then suddenly a starlight came down from heaven toward Rama. As it approached ... Rama saw that it was a brilliant aerial chariot, a silver car with weapons hung in racks that shone like lanterns, drawn by 10 silver-gray horses flying abreast, and coming closer and closer with many fan-blades spinning and silver blades all flashing." Japan, summer 655: "In the midst of the Void there was seen one riding on a dragon, who resembled a man of Thang in appearance. He had on a broad hat of green oiled stuff. He rode fast from the peak of Katsuraki and disappeared on Mount Ikoma. When it became noon, he galloped off over the firs of Sumiyoshi in a westerly direction" (*Nihongi, op. cit.*).

Aerial ships. Rome, 218-17 B.C.: "Shapes like shining ships had appeared in the sky" (Livy, *op. cit.*). 173 B.C.: "At Lanuvium the vision of a great fleet was said to have been seen in the sky" (*ibid.*). Irish records contain a number of aerial-ship stories. One tells of worshippers of Clonmacnois; as they emerged from church, they found a ship's anchor hooked in an arch of the building. A man came down the rope as if swimming from the ship above, apparently to free the anchor, but the people seized him. Only the intervention of the bishop saved the man. He swam back up to the ship, and his crewmen cut the rope. Gervase of Tilbury retells this same story, after relocating it in England. Ireland, 743: "Ships, with their crews, were plainly seen in the sky this year" (*Annals of the Four Masters,* 1856). Ireland, 956: "Congalach ... was at the fair of Teltown ... when he saw a ship sailing along in the air. One of the crew cast a dart at a salmon. The dart fell down in the presence of the gathering, and a man came out of the ship after it. When he seized its end from above, a man from below seized it from below. Upon which the man from above said: 'I am being drowned,' said he. 'Let him go,' said Congalach; and he is allowed to go up, and then he goes from them swimming" (Meyer, 1910). England, 1254: "In the night season ... there appeared in the element the perfect form and likeness of a mighty great ship, which was first seen of certain monks of St. Albans.... At length it seemed as the boards and joints thereof had gone in sunder, and so it vanished away" (Holinshed, 1808). New Haven, Connecticut, June 1648: "There appeared over the harbor ... in the evening, the form of the keel of a ship with three masts, to which were suddenly added all the tackling and sails, and presently after, upon the top of the poop, a man standing with one hand akimbo ... and in his right hand a sword stretched out toward the sea. Then from the side of the ship which was from the town arose a great smoke, which covered all the ship,

and in that smoke she vanished away.... This was seen by many ... and it continued about a quarter of an hour" (Winthrop, *op. cit.*).

UFO-like phenomena. The number of pre-1800 anomalies with any resemblance to modern UFOs is small. The number of these that are genuine unknowns is smaller still. Rome, 100 B.C.: "A burning shield darted across at sunset, from west to east, throwing out sparks" (Pliny, 1855). Obsequens says, "At sunset a circular object like a shield was seen to sweep across from west to east" (279). These "shields" are probably meteors, but a more impressive "flying-saucer" report comes from the time of Charlemagne. Germany, A.D. 776: The Saxons revolted against the Franks and were storming the castle at Syburg, on the Ruhr. "One day ... God's glory was made manifest over the castle church in the sight of a great number outside as well as inside.... They reportedly saw the likeness of two shields red with flame wheeling over the church. When the heathens outside saw this miracle, they were at once thrown into confusion and started fleeing their camp in terror" (Scholz, 1970). Several UFO books from the 1950s included a report from Byland Abbey in 1290, saying that a silvery discus flew by and caused utmost terror. Strong evidence indicates that this story is a fake (Rosenberg, *op. cit.*), and the simple fact that no other chronicle repeats this event, despite the common practice of borrowing from other sources, adds to the certitude of this evaluation.

Other meteoric accounts are intriguing, if not very convincing. Italy, 212 B.C.: "At Reate a big rock was seen to fly through the air" (Livy, *op. cit.*). France, A.D. 590: "So bright a light illuminated a wide spread of lands in the middle of the night that you would have thought that it was high noon. On a number of occasions fiery globes were also seen traversing the sky in the night-time, so that they seemed to light up the whole earth" (Gregory of Tours, *op. cit.*). Halberstadt, Saxony, April 24, 1546: "There was seen a ball of a black color going with a great violence, from amid the moon towards the north" (Bateman, *op. cit.*).

Some meteors are impressive for the motion attributed to them in the accounts. Aegos Potami, August 405 B.C.: The Spartan commander Lysander defeated the Athenian fleet near the Hellespont. Two starlike lights were said to have accompanied his ship, and a "stone of great size did fall ... which is shown to this day.... [Daimachus] says, that before this stone fell, for seventy-five days continually, there was seen in the heavens a vast fiery body, as if it had been a flaming cloud, not resting, but carried about with several intricate and broken movements, so that the flaming pieces, which were broken off by this commotion ... were carried in all directions, shining as falling stars do. But when it afterwards came down to the ground ... there was no fire to be seen, neither any sign of it; there was only a stone lying, big indeed, but which bore no proportion ... to that fiery compass" (Plutarch, *op. cit.*). The stone sounds like a genuine meteorite; as for the more elaborate story, Plutarch adds, "It is manifest that Daimachus needs to have indulgent hearers," if his account is to gain credit. China, A.D. 235: "Chuko Liang led a large army against the Wei [kingdom]. When his troops were stationed at Wei-nan a red meteor with pointed rays fell from the north-east towards the south-west into his camps. The meteor moved to and fro three times above the camps, being of a greater magnitude each time on its forward movement than on its return" (Ho, 1966). Tours, France, January 31, 583: "The people had got up and were on their way to church. The sky was overcast, and it was raining. Suddenly a great ball of fire fell from the sky and moved some considerable distance through the air, shining so brightly that visibility was as clear as at high noon. Then it disappeared once more behind a cloud, and darkness fell again" (Gregory of Tours, *op. cit.*). Annam (Vietnam), March or April 1276: "There was a 'combat' between two stars in the heavens; one of them fell as a meteor" (Ho, 1964).

Phenomena of a different sort are described in the three events that follow. Spoletum, 91 B.C.: A "gold-colored fireball rolled down to the ground; increased in size, it seemed to move off the ground towards the east, and was big enough to blot out the sun" (Obsequens, *op. cit.*). Pliny describes the same occurrence: "We have an account of a spark falling from a star, and increasing as it approached the earth, until it became of the size of the moon, shining as through a cloud; it afterwards returned to the heavens and was converted into a *lampas*.... It was seen by Silanus, the

proconsul, and his attendants" (Pliny, *op. cit.*). Ball lightning has been proposed as a solution for this appearance and may apply to the next two. Erdford, Germany, 1520: "[T]here were seen two suns, and a burning became of a wonderful greatness in the element, which falling down upon the ground destroyed many places. Turning from thence to the air, it put on a round form" (Bateman, *op. cit.*). Near Pfortzheim, Baden, Germany, May 1543: "At a village called Zessenhusen, between four and five of the clock in the afternoon a great comet was seen, that was bigger than a millstone to see ... which stretched out his tail towards the north, from whence a fire descending to the earth like a dragon, drunk clean up the brook that was next unto it, from thence flying into a field, consuming a great part of the corn, and mounting up again left behind horrible tokens of these things to be seen" (*ibid.*).

Hertfordshire, England, October 30, 1660: "Three persons ... going before day ... were on a sudden smitten with a great terrible flash of lightning; after which the air continued very light ... and [they] concluded that some house at Meisden had been on fire; but they having not ridden much further perceived the fire in a great body to ascend, and the sky opening to receive it; and as it went up, three stars one immediately after another fell down from it perpendicularly.... Some part of the body of fire which ascended, remained yet in their view, and after a little space it turned into the direct form of a sickle with a handle ... and continued ... till the daylight swallowed it up" (*Mirabilis Annus*, 1661–62). Ireland, 1689: Several men coming north from Dublin, "about nine a clock at night ... espied several little twinkling lights in the air, with two larger than the rest." A little later one man went ahead of his companions and "saw the same lights again, as nigh he could guess, about the ground where [the British army] afterwards encamped: On the side of the hill ... he turned about and looked at them, and at the same time he heard the most dismal and heavy groans in the world" (Crouch, 1691).

Some reports combine seemingly familiar auroral or halo phenomena with some unusual movements. England, 979: "In the same year was seen oftentimes a bloody cloud, in the likeness of fire; and that was most apparent at midnight; and was colored in various ways. Then when it was about dawn it glided away" (*Anglo-Saxon Chronicle*, 1964). York, England, December 1200: "A little before Christmas, about the first watch of the night, five moons appeared in the heavens; the first appeared to the north, the second in the south, the third in the west, the fourth in the east, the fifth appeared in the middle of the first four, with several stars around it; and this last one, with its accompanying stars, made the circuit of the other four moons five times or more. This phenomenon lasted for about an hour, to the wonder of many who beheld it" (Roger of Wendover, *op. cit.*). Near London, November 5, 1660: "Two men ... very early in the morning from under it appeared two stars as big as the moon, and ... they did with great violence contend with each other. One star grew dimmer and the other brighter during the contest of two hours' duration. Streams of fire and blood poured down from the stars" (*Mirabilis Annus, op. cit.*).

In some cases the reports are most likely fantastic distortions or exaggerations of natural events, though perhaps unusual manifestations of nature. Switzerland and Germany, December 30, 1560: A large red aurora appeared over much of Europe and was interpreted as a prodigy. Many reports of incidents associated with this event reached Joachim Camerarius, who said of the letters, "They do show a certain monstrous thing seen in the field of Bern: There appeared a fiery globe in which a bear and a lion seemed to fight together. In the dominion of [Groeningen?] they write that a globe of fire did fly so near a village, that a husbandman was afraid of the burning of his house, because the fire was seen so near to the top of the house" (*Strange News, or the History of Strange Wonders*, 1561). Hungary, 1617: "One afternoon ... there appeared ... a black circular cloud, from which blood dropped like rain. This atmospheric appearance was accompanied by a most tremendous burst of thunder, and in the cloud there was seen the appearance of fiery crosses. After this cloud had condensed itself, a great quantity of smoke began to issue from it in all directions; and shortly afterwards another tremendous burst of thunder was heard.... [T]he cattle in the field fell upon their knees ... and then fled wild in all directions, many of which were never afterwards found.... From this cloud, also, descended black round hail" (Naima, 1832). En-

gland, 1659: Several prodigies appeared between Leicester and Nottingham, and among them there was "the dismal sight in the air, on Sabbath day last was a fortnight, prodigiously representing itself from one of the clock in the forenoon, till about a quarter and a half after three, in the perfect figure and form of a black coffin, with a fiery dart, and a flaming sword flying to and again, backwards and forwards toward the head of the said coffin, which was ... beheld by many hundreds of people.... And very observable it is, that the fiery dart, or arrow, during the time that the coffin lay hovering and flying up and down in the air, seemed as it were to charge each other, and with such clashing, and streaks of fire, as the like is not to be parallel'd in any age; but upon the dissolution of the coffin, abundance of streams of fire proceeded from it" (*The Five Strange Wonders,* 1659).

The continuation of supernatural aerial anomalies. Though the eighteenth century was a time of transition from supernatural to natural anomalies, the replacement of the older tradition by the newer came about slowly and by degrees. Though supernatural anomalies have become scarce, the tradition has persisted down to the present. In June 1735 and on several other occasions, various witnesses reported the age-old phantom army, this time marching on Souter-fell, in England ("A Journey," 1747). On August 7, 1806, a number of persons near Chimney Rock, North Carolina, saw a host of beings dressed in brilliant white raiment hovering around the mountain, and the same site hosted an aerial cavalry fight in September 1811 (Newton, 1960; McDowell, 1961). At a village near Warasdin, Hungary, the inhabitants saw great divisions of infantry in the air, the men dressed in scarlet caps and the chief waving a flashing sword in the air. This apparition appeared early in 1887, and the villagers were convinced that a war was imminent ("Tales of the Supernatural." *New York World,* April 24, 1887). A legend arose after the Battle of Mons in 1914 that angels or bowmen had fought for the British (Machen, 1915). In Germany in 1934, "[w]hen Field Marshal von Hindenburg died ... then the gray soldiers of the World War appeared in the clouds, to give their dead field commander an escort to Tannenburg.... In all East Prussia the gray army was clearly and plainly seen" (Pohl, 1975).

The "Star of Bethlehem" reappeared from time to time, according to some beliefs. Several persons wrote to newspapers reporting Venus as the Star in 1887 (*New York Daily Graphic,* May 31, 1887), and the airship light of 1897 inspired similar comments.Religious fervor continued to inspire supernatural manifestations, among them the following:

"Having heard that fire had descended on several of the great Irish assemblies during the Revivals [of 1859] I ... made inquiry and conversed with those who had witnessed it. During the open-air meetings, when some 600 to 1000 people were present, a kind of cloud of fire approached in the air, hovered and dipped over the people, rose and floated on some distance, again hovered on ... another revival meeting, and so it continued" (Grey, 1915). The revivals in Wales during 1905 produced many reports of lights and balls of fire hovering around the assemblies, but especially near one of the leading evangelists, Mrs. Mary Jones (McClure and McClure, 1980). Apparitions of the Virgin Mary were common in the nineteenth century. The inmates of an Irish orphanage saw her standing on a radiant cloud in the summer of 1880, while at sunset luminous globes of various colors floated through the air ("Miraculous Apparitions in Limerick." *New York Herald,* September 1, 1880). One of the most spectacular apparitions occurred at Fatima, Portugal, in 1917. A series of appearances included aerial passages of the Virgin and culminated on October 13 when some 50,000 witnesses saw the sun turn pale, spin on its axis, and seem to fall from the sky (Walsh, 1954; *see also* **Fatima Miracle**). Such apparitions continue even now, with a series of reports coming from Medjugordge, Yugoslavia, and Nicaragua during the 1980s.

Ghostly lights still appear, such as those at Brown Mountain and Maco Station, North Carolina, Hornet, Missouri, and Marfa, Texas. In February 1909 the residents of a mining village in Pennsylvania found the body of a murder victim by investigating an arrow of flame which hovered over the spot (*Indianapolis Star,* February 14, 1909). The age of invention even opened new opportunities for ghostlore as a spectral light marked the site of many railroad accidents in the nineteenth century.

The beginning of naturalistic anomalies. Most aerial anomalies reported in the eighteenth century dif-

fered little in description from reports of earlier centuries. *Gentleman's Magazine* for 1756 noted that a "very uncommon phenomenon was observed at Wepio in Sweden. A luminous body, as large as a full moon, passed from the southwest to the northeast, from whence issued a stream of light in a straight line, which during its continuance gave night the appearance of day; but when it disappeared, it left behind it a thick smoke" (p. 38). This report probably describes a large meteor, though the writer still treats the appearance as unusual. What he does not attribute to the object is a supernatural significance. The transition to naturalism was complete when the witness assumed that the object he saw on December 16, 1742, over London was a meteor, then reported it to *Philosophical Transactions* (43:524-25) because it was an unusual meteor. This object moved parallel to the horizon, undulated in flight, and stayed in sight for half a minute. Moreover, the meteor's fiery head, as large as the full moon, seemed surrounded and bisected by a dark frame "like bands of iron." Here, then, was an anomaly—a meteor that did not look or act as a meteor should.

Other anomalies began to accumulate as science developed in the eighteenth century. Several astronomers reported a satellite of the planet Venus, but later observers could find no sign of this moon. One observation of especial peculiarity began on August 9, 1762, when a Swiss astronomer saw through his telescope a strange body crossing the face of the sun. The body was of considerable size and spindle-shaped. "This spindle kept continually advancing on the sun's body, from east towards west, with no more than about half the velocity with which the ordinary solar spots move; for it did not disappear till the 7th of September.... Another observer some distance away saw the object, but it crossed a different segment of the sun, indicating that the body was located between the earth and the sun ("Natural History," 1766). As scientific understanding advanced, observations of aerial phenomena that violated this understanding began to accumulate.

Later uses of pre-1800 aerial anomalies in the UFO literature. From the earliest years of the modern UFO era, authors took an interest in early reports as a way to establish a pedigree for current sightings. Desmond Leslie's chapters in *Flying Saucers Have Landed* (1953) and **Harold T. Wilkins** in *Flying Saucers on the Attack* (1954) drew extensively on early reports to prove that airplanes and balloons could not explain all reports. Strange sights appeared before human inventions cluttered the skies. If UFOs were age-old, space visitors might have had an interest in the earth for many centuries. Donald H. Menzel made use of old reports as well in his book *Flying Saucers* (1953) but for the opposite reason. He called on these examples to prove that people had always seen strange and wonderful sights in the sky, and people of the present age maintained a similar interest. The forms of UFOs changed with the times and expectations of the observers, but the stimulus of unfamiliar and misidentified natural phenomena remained constant through the ages.

These two opposing directions have continued throughout modern ufological history. The Theosophists and writers on Atlantis or other lost continents had fostered a tradition of advanced ancient civilizations with superior scientific capabilities for many decades before the first flying-saucer reports. This theme and its indred idea that prehistoric visitors from space brought the secrets of culture to primitive human beings also proved popular among science-fiction writers. Richard Shaver's stories of ancient races still hiding underground—the so-called **Shaver mystery**—enjoyed considerable popularity on the eve of the modern UFO era. The ancient-visitation theme has continued as a tenacious element of UFO belief, fostered in the late 1950s and early 1960s by such speculators as **George Hunt Williamson** and Brinsley le Poer Trench.

The true heyday of the "ancient-astronaut" movement began only at the end of the 1960s, when Erich von Däniken's books popularized the idea that superscientific alien visitors were responsible for the architectural achievements of antiquity. A vast number of books, most of them dismally researched and reasoned, followed on von Däniken's coattails during the 1970s. Only W. Raymond Drake's *Gods and Spacemen* series reflected any extensive erudition. NASA engineer Josef F. Blumrich's *The Spaceships of Ezekiel* (1974) made an intriguing though misplaced effort to translate the metaphoric biblical account into a properly engineered spacecraft. Robert K. G. Temple explored the African Dogon people's lore regarding

the star Sirius in his book *The Sirius Mystery* (1976). Here alone is anything close to evidence that some external source may have provided the people of earth with advanced knowledge. On the other hand, Ronald Story argues in his book *Guardians of the Universe* (1980) that advanced knowledge most likely came from terrestrial sources in modern times.

A more sophisticated use of early sightings and the mythology of otherworldly contact has been in efforts to revise or dismiss the extraterrestrial hypothesis. Jacques Vallee draws extensively on fairylore in *Passport to Magonia* (1969), not to follow the old party line that these stories hide meetings with extraterrestrials behind a screen of folklore but to create a new concept of the extraterrestrial. The beings of UFOs become not space travelers but something akin to the otherworldly beings of tradition. Together they form part of a larger reality glimpsed in various forms throughout the ages but different in form and purpose from our narrow and anthropocentric views. Jerome Clark and Loren Coleman internalized this idea in *The Unidentified* (1975). Drawing on C. G. Jung's theory of archetypes (*see* **Jung and UFOs**), fairies and UFO occupants become symbols of fundamental psychological transformation. The psychosocial school of UFO interpretation has turned to early reports as proof that UFOs reflect the beliefs and expectations of a given age, and not necessarily paranormal psychic processes, cosmic control systems, or space-traveling aliens. In terms of psychosocial theory, the fact that UFOs change over time is perhaps the most convincing reason to doubt that they are objective phenomena.

Aerial phenomena of the supernatural era compare but poorly to the UFOs of today. In a time when all infrequent occurrences were mysterious, any odd sight in the sky became a "UFO" in the literal sense of the term. Even today conventional phenomena stimulate the majority of UFO reports. In a less discriminating age, the proportion of genuine mysteries to natural events must have been smaller still. Modern readers have no trouble identifying most of the appearances as astronomical or meteorological in nature, but the language of descriptions often complicates the recognition process. A complex international vocabulary developed around each sort of phenomenon. For example, meteors went by the names of torch, lamp, dart, and beam in the writings of the Roman author Pliny; the seventeenth-century English author William Fulke added spark of fire, dancing goat, burning candle, burning spear, and flying dragon; Chinese and Annamese (Vietnamese) astronomers used such terms as stray arrow and drifting star.

Another handicap in understanding these early aerial anomalies is the conceptual bias of the recorders. One of the most famous supernatural signs appeared to the Roman Emperor Constantine in A.D. 312. During a military campaign he acknowledged his need for divine help, pondered which god to pray to, and finally renounced paganism to accept the Christian God. Then at noon a luminous cross appeared in the sky, bearing the inscription, "Conquer With This." The amazing sight led Constantine to victory, and he became the first Christian emperor of Rome. This account in all its outlines repeats many accounts that had come before and many others that would follow. At a time of crisis for the individual or the state, a supernatural manifestation appears and helps resolve the crisis. The message is inherently ambiguous in most cases and often goes unheeded, usually with dire consequences understood in full only by the historian after the fact. Obedience to the message proves the proper course of action, again after the fact.

This pattern repeats with stereotypical regularity, one writer following another in an age-old tradition of imposing a significant message on anomalous aerial phenomena. In one sense the importance attached to these events had a positive result. The old writers considered the events worth recording and often set them down in some detail. What remains in question is how much of the account is observation and how much is tradition. The Christian writer Eusebius recounted the Constantine story with an obvious purpose in mind—to show that God intervened with help for a man who prayed to Him. Few aerial apparitions carried a lettered message, but the figure of a cross has unmistakable meaning for Christians. Such forms did not appear in pagan histories but became quite common when the historians became Christians. Accurate reporting took second place to advancement of the faith, so the modern reader has good reason to suspect that every account

is a distortion mandated by the literary and intellectual fashions of the day. This trend became acute in the sixteenth and seventeenth centuries when propagandists twisted or fabricated prodigy accounts for political purposes.

Our view of the anomalies of the past is consequently a limited one. The beliefs of the era shine through brightly enough, but the underlying truths remain dim. Age, language, belief, motive, and understanding combine to obscure the reports from this era. It matches our own as a time haunted by otherworldly visitation, when people marveled at strange sights in the sky, but beyond those general comparisons the two periods diverge almost completely. Pre-1800 anomalies do not make a case for long-term alien visitation, nor do they necessarily refute it. Too many uncertainties cloud our view to say with confidence whether or not valid UFOs join the natural phenomena that make up most of the early record.

Thomas E. Bullard

Sources:

Anglo-Saxon Chronicle. Millwood, NY: Kraus Reprint, 1964.

Annals of Loch Ce. Millwood, NY: Kraus Reprint, 1965.

Annals of Roger de Hovenden. London: Bohn, 1853.

Annals of the Four Masters. Dublin: Hodges, Smith and Company, 1856.

Aubrey, John. *Miscellanies* (1721). In John Aubrey's *Three Prose Works*. Fontwell, Sussex: Centaur Press, 1972.

Bateman, Stephen. *The Doome Warning All Men to the Judgemente*. London: Ralph Nubery, 1581.

Baxter, Richard. *Certainty of the Worlds of Spirits*. London: Printed for T. Parkhurst and J. Salisbury, 1691.

Bede. *A History of the English Church and People*. Baltimore, MD: Penguin Books, 1970.

Brinckmair, L. *The Warnings of Germany*. London, 1638.

Budge, E. A. Wallis. *Egyptian Literature, Vol. 1: Legends of the Gods*. London: K. Paul, Trench, Trubner, 1912.

Camden, William. *Camden's Brittanica*. London: F. Collins, 1695.

Christian, William A., Jr. *Apparitions in Late Medieval and Renaissance Spain*. Princeton, NJ: Princeton University Press, 1981.

Clark, David H., and F. Richard Stephenson. *The Historical Supernovae*. New York: Pergamon Press, 1979.

Craigie, William A. *Scandinavian Folk-Lore*. London: Alexander Gardner, 1896.

Crouch, Nathaniel. *The English Empire in America*. London, 1685.

——. *An Impartial History of the Affairs of Ireland During the Last Two Years*, 1691.

Dio Cassius, *Annals of Rome*. Troy, NY: Pafraets Press, 1905.

Eliade, Mircea. *Shamanism*. Princeton, NJ: Princeton University Press, 1974.

Evans-Wentz, Walter Yeeling. *The Fairy Faith in Celtic Countries*. New York: Lemma Press, 1973.

Evelyn, John. *Diary*. Oxford: Clarendon Press, 1955.

The Five Strange Wonders in the North and West of England. London, 1659.

Florence of Worchester. *Chronicle*. London: H. G. Bohn, 1854.

Gaimar, Geoffroy. *History of the English*. In *Rerum Britannicarum Medii Aeri Scriptores, or Chronicles and Memorials of Great Britain and Ireland during the Middle Ages*. London: Her Majesty's Stationery Office, 1889 (Millwood, NY: Kraus Reprint, 1966).

Genealogies of the Kings of England. London: Longmans, Green, Reader, and Dyer, 1865.

Geoffrey of Monmouth. *History of the Kings of Britain*. Baltimore, MD: Penguin Books, 1966.

Gregory of Tours. *History of the Franks*. Baltimore, MD: Penguin Books, 1977.

Grey, E. Howard. *Visions, Previsions and Miracles in Modern Times*. London: L.N. Fowler and Company, 1915.

Himmelfarb, Martha. *Tours of Hell*. Philadelphia, PA: University of Pennsylvania Press, 1983.

Ho Peng-Yoke. *The Astronomical Chapters of the Chin Shu*. The Hague, Netherlands: Mouton, 1966.

——. "Natural Phenomena Recorded in the Dai-Viet Su'-Ky Toan-Thu', an Early Annamese Historical Source." *Journal of the American Oriental Society* 84 (1964):127-49.

Holinshed, Raphael. *Holinshed's Chronicles of England, Scotland, and Ireland*. 6 vols. London: Printed for J. Johnson, 1808.

Howells, W. *Cambrian Superstitions*. London: Longman and Company, 1831.

Josephus. *Jewish War.* Baltimore, MD: Penguin Books, 1976.

"A Journey to Caudebec Fells." *Gentleman's Magazine* (1747).

Krauss, Franklin Brunel. *An Interpretation of the Omens, Portents, and Prodigies Recorded by Livy, Tacitus, and Suetonius.* Philadelphia, PA: The Author, 1930.

"The Last Days of Krishna and the Sons of Pandu." Trans. by David Price. In *Miscellaneous Translations from Oriental Languages.* London: Oriental Translation Fund, 1831.

Life of St. Columba. Edinburgh, Scotland: Edmonston and Douglas, 1874.

Livy. *The War with Hannibal.* Baltimore, MD: Penguin Books, 1972.

Loomis, C. Grant. *White Magic.* Cambridge, MA: Medieval Academy of America, 1948.

MacBain, Bruce. *Prodigy and Expiation.* Bruxelles, Belgium: Latomus, 1982.

McClure, Kevin, and Sue McClure. *Stars, and Rumors of Stars.* Market Harborough, Leicester: The Authors, 1980.

McDowell, Silas. "A Spectre Cavalry Fight." *North Carolina Folklore* 9,2 (December 1961).

Machen, Arthur. *The Angels of Mons.* London: Simpkin, Marshall and Company, 1915.

Mather, Cotton. "Wonders of the Invisible World" (1692). In *Narratives of the Witchcraft Cases.* New York: Scribners, 1914.

Melissinos, Makarios. "Chronicle of the Siege of Constantinople," 97-136. In Georgios Phrantzes's *Fall of the Byzantine Empire.* Amherst, MA: University of Massachusetts Press, 1980.

Meyer, Kuno. "Irish Mirabilia in the Norse 'Speculum Regale'," *Eriu* 4 (1910).

Mirabilis Annus, or the Year of Prodigies and Wonders. Pts. 1-3. London, 1661-62.

Moncada, Francisco de. *Catalan Chronicle.* El Paso, TX: University of Texas Press, 1975.

Monshi, Eskandar. *History of Shah 'Abbas the Great.* Trans. by Roger M. Savory. Boulder, CO: Westview Press, 1978.

Naima, Mustafa. *Annals of the Turkish Empire.* London: Oriental Translation Fund, 1832.

"Natural History: An account of a very singular phenomena seen in the disk of the sun, in different parts of Europe, and not in others." *Annual Register* 9 (1766).

Needham, Joseph. *Science and Civilization in China, Vol. 3.* New York: Cambridge University Press, 1959.

Neihardt, John G. *Black Elk Speaks.* New York: Pocket Books, 1972.

Nestor. *Russian Primary Chronicle.* Cambridge, MA: Harvard University Press, 1930.

Newman, L.F., and E.M. Wilson. "Folklore Survivals in the 'Lake Counties' and in Essex." *Folk-Lore* 63 (1952).

Newton, George. "Shining Figures on Chimney Rock." *North Carolina Folklore* 8,1 (July 1960).

Nihongi. London: Allen and Unwin, 1956.

Obsequens, Julius. *A Book of Prodigies* in Livy's *Roman History,* vol. 14 (Loeb Classical Library). Cambridge, MA: Harvard University Press, 1959.

Peterborough Chronicle. New York: Columbia University Press, 1971.

Pliny, *Natural History.* London: Bohn, 1855.

Plutarch. *Plutarch's Lives.* New York: Modern Library, 1977.

Pohl, Erich. *Die Volkssagen Ostpreussens.* Hildesheim, Germany: Georg Ohms Verlag, 1975.

Roger of Wendover. *Flowers of History.* 2 vols. London: H. G. Bohn, 1849.

Rosenberg, Samuel. "UFOs in History," 481-502. In Daniel S. Gillmor, ed. *Scientific Study of Unidentified Flying Objects.* New York: Bantam Books, 1969.

Scholz, Bernhard Walter, ed. *Carolingan Chronicles.* Ann Arbor, MI: University of Michigan Press, 1970.

Ssu-ma Chi'en, *Records of the Grand Historian of China.* 2 vols. New York: Columbia University Press, 1961.

Strange News, or the History of Strange Wonders. London, 1561.

Thomas, Keith. *Religion and the Decline of Magic.* New York: Charles Scribner's Sons, 1971.

Thompson, Stith. *Tales of the North American Indians.* Bloomington, IN: Indiana University Press, 1966.

Visser, M. W. de. "Fire and Ignes Fatui in China and Japan." *Mitteilungen des Seminars für Orientalische Sprachen Berlin* 17 (1914).

Walsh, William. *Our Lady of Fatima.* Garden City, NJ: Doubleday and Company, 1954.

Ward, Benedicta. *Miracles and the Medieval Mind.* Philadelphia: University of Pennsylvania Press, 1982.

Wilkins, Harold Tom. *Flying Saucers on the Attack.* New York: Citadel Press, 1954.

Williams, J. *Chinese Observations of Comets.* London: Strangeways and Walden, 1871.

Winthrop, John. *Winthrop's Journal, "History of New England" (1630-1649).* New York: Barnes and Noble, 1959.

Zaleski, Carol. *Otherworld Journeys.* New York: Oxford University Press, 1987.

ARMSTRONG CIRCLE THEATER BROADCAST

In December 1957 **Donald E. Keyhoe**, director of the **National Investigations Committee on Aerial Phenomena** (NICAP), was invited to appear on a popular CBS television program, *Armstrong Circle Theater*, to talk about UFOs, along with Kenneth Arnold (whose June 24, 1947, sighting brought "flying saucers" into public consciousness; *see* **Kenneth Arnold Sighting**) and Eastern Airlines pilot and UFO witness Clarence S. Chiles (*see* **Chiles-Whitted Sighting**). Other guests were to be former **Project Blue Book** head **Edward J. Ruppelt**, astronomer/UFO debunker Donald H. Menzel, and a representative of the U.S. Air Force.

Keyhoe was disappointed to learn that the show would not be a panel discussion. It would be scripted, thus preventing him from asking the Air Force hard questions. He was also unhappy when he was told that he would have only seven minutes. When promised that he would have final say on his part of the script, however, he agreed to appear on the show (titled *UFO: The Enigma of the Skies*), scheduled for the evening of January 22, 1958.

Keyhoe prepared a script which contrasted positive Air Force statements (such as a Top Secret 1948 "**Estimate of the Situation**" which concluded UFOs were interplanetary) with later contradictory negative Air Force pronouncements about UFOs. But then *Armstrong Circle Theater* writer Irve Tunick edited out the material, claiming that it made Keyhoe's script "too long" (Keyhoe, 1960). After an argument Tunick seemed to agree to reinstate the critical information, but when Keyhoe arrived in New York to rehearse, Tunick told him he could say nothing about "hidden documents" such as the Estimate of the Situation, whose existence the Air Force was (falsely) denying (Tacker, 1960) even after it had been reported openly in Ruppelt's Blue Book memoir *The Report on Unidentified Flying Objects* (1956).

By now Ruppelt and Chiles had withdrawn from participation in the show (Chiles reportedly because of pressure from his employer), and soon Arnold, who complained the show was "rigged" in favor of the Air Force, left, too. (In a telegram message addressed to Tunick, Arnold wrote: "The persons or agencies who project information of national interest have a serious responsibility. A correctly informed public is one of the greatest assets this nation can have. This is to inform you that I will not be a participant on any program that obviously misrepresents and distorts facts" [Palmer, 1958].) Though he now had a total of 11 minutes with which to speak, Keyhoe felt that the Air Force was censoring the show, though Tunick denied it.

When the show was finally aired, Lt. Col. Spencer Whedon outlined the Air Force position that all UFOs are explainable. A thoroughly frustrated Keyhoe came on and dutifully read his script for a few minutes, then shocked everyone present by abruptly departing from it. He began, "And now I'm going to reveal something that has never been disclosed before. For the last six months we have been working with a Congressional committee investigating official secrecy about UFOs. If all the evidence we have given this committee is made public in open hearings, it would be proved–". At this juncture program engineers stopped his microphone, though the picture continued, with Keyhoe's lips moving silently. Unaware of what had just happened, he continued to speak, finishing his sentence with these words: "– that it will absolutely prove that the UFOs are real machines under intelligent control" (Keyhoe, *op. cit.*).

"I quickly regretted the action," Keyhoe would later write. His action sparked headlines and furious controversy. He told the Associated Press that "this was not an attempt at censorship on the part of *Armstrong Circle Theater* or CBS" (Palmer, *op. cit.*). Yet these were not his real feelings; he had backpedaled only to protect Tunick and producer Robert Costello who were simply "victims of official pressure" (Keyhoe, *op. cit.*). At least one newspaper editorialist, a writer for the *Lorain* [Ohio] *Journal*, was less charitable. The

day after the program aired, he blasted government secrecy generally, mentioning the *Circle Theater* episode in passing as "de facto censorship in the form of sound failure ... imposed at the only point where anything of genuine news interest appeared in prospect."

Keyhoe's actions were not universally praised even in the UFO community. The *A.P.R.O. Bulletin*, published by the **Aerial Phenomena Research Organization**, remarked, "If Major Keyhoe attempted to insert a state[ment] extemporaneously, which was not in the script, *Armstrong Circle Theater* production people were within their rights in cutting him off.... It is difficult to ascertain whether or not this was a deliberate move on the part of Mr. Keyhoe, calculated to insinuate censorship, whether or not it actually existed" ("*Armstrong Circle Theater*," 1958).

But in a remarkable admission CBS acknowledged that in effect it *had* censored Keyhoe at the direction of the Air Force. Herbert A. Carlborg, the network's director of editing, wrote in response to a query from a NICAP member: "This program had been carefully cleared for security reasons. Therefore, it was the responsibility of this network to insure performance in accordance with predetermined security standards. Any indication that there would be a deviation might lead to statements that neither this network nor the individuals on the program were authorized to release. As a consequence, public interest was served by the action taken by CBS in deleting the audio in Major Keyhoe's speech at a point where he apparently was about to deviate from the script" ("New Angle," 1958).

Reviewing the episode many years later, investigative journalist Howard Blum wrote that it demonstrated that the Air Force's policy of UFO secrecy "had been set and accepted by all levels of the establishment" (Blum, 1990).

Sources:

"*Armstrong Circle Theater.*" *The A.P.R.O. Bulletin* (January 1958): 5.

Blum, Howard. *Out There: The Government's Secret Quest for Extraterrestrials.* New York: Simon and Schuster, 1990.

Jacobs, David Michael. *The UFO Controversy in America.* Bloomington, IN: Indiana University Press, 1975.

Keyhoe, Donald E. *Flying Saucers: Top Secret.* New York: G. P. Putnam's Sons, 1960.

"Major Keyhoe Cut off the Air." *Flying Saucer Review* 4,2 (March/April 1958): 2-3.

"New Angle on Armstrong Show." *Confidential NICAP Bulletin* (April 4, 1958).

Palmer, Ray. "Editorial." *Flying Saucers* (May 1958): 4-13.

Ruppelt, Edward J. *The Report on Unidentified Flying Objects.* Garden City, NY: Doubleday & Company, 1956.

Tacker, Lawrence J. *Flying Saucers and the U.S. Air Force.* Princeton, NJ: D. Van Nostrand Company, 1960.

ARNOLD, KENNETH. *See* **Kenneth Arnold Sighting.**

AUSTRALIAN FLYING SAUCER BUREAU. *See* **UFOs in Australia and New Zealand.**

AZTEC UFO CRASH. *See* **Scully Hoax.**

Good data on angel-hair samples are as rare as angel-hair reports. Until we know more, the nature of the phenomenon will remain a mystery.

Sources:

Corliss, William R., ed. *Handbook of Unusual Natural Phenomena.* Glen Arm, MD: The Sourcebook Project, 1977.

Hall, Richard H., ed. *The UFO Evidence.* Washington, DC: National Investigations Committee on Aerial Phenomena, 1964.

Keyhoe, Donald E. *The Flying Saucer Conspiracy.* New York: Henry Holt and Company, 1955.

Manak, Allan J. *Ice Falls and Angel Hair: A Chronological Catalog of Ice Falls and Angel Hair Anomalies.* Cleveland, OH: United Aerial Phenomena Agency, 1994.

Maney, Charles A., and Richard H. Hall. *The Challenge of Unidentified Flying Objects.* Washington, DC: The Authors, 1961.

Michel, Aimé. *The Truth About Flying Saucers.* New York: Criterion Books, 1956.

"Strange Craft Litters French Town with Thread-Like Substance." *Civilian Saucer Investigation Quarterly Bulletin* 1,2 (Winter 1953): 4-5.

Tomeo, Mark. "Many Report Sighting UFOs Locally." *Danville* [Pennsylvania] *News* (February 26, 1988).

Vallee, Jacques, and Janine Vallee. *Challenge to Science: The UFO Enigma.* Chicago: Henry Regnery Company, 1966.

ANIMAL MUTILATIONS AND UFOS.

→*See* **Dark Side.**

ANOMALOUS AERIAL PHENOMENA BEFORE 1800

Not even UFOs are new things under the sun. The twentieth century did not invent them; rather it inherited an age-old preoccupation of mankind with strange sights in the sky, and a rich legacy of observations preserved in writing as worthy of remembrance for as long as historical records have existed. Human ideas about the nature of those sights have changed in slow succession over the centuries, and a history of these ideas divides into three distinct eras. The prevailing modern view equates aerial mysteries with machinery of advanced design, always a step ahead of current technology, a notion that set in during the late nineteenth century with the appearance of unidentified **airship sightings** and continued into this century with mystery aircraft, **foo fighters**, **ghost rockets**, flying saucers, and

UFOs. Mechanical wonders have supplemented and, in large part, supplanted the idea of anomalous natural phenomena that took hold in the eighteenth century and dominated the nineteenth. In naturalistic terms anything mysterious in the sky had to be peculiar meteors, auroras, or electrical discharges, freak manifestations of astronomy or the atmosphere.

By far the longest era of belief lasted from earliest times until the eighteenth century and survives even today. In this conception any strange sight in the sky originated with supernatural powers, with the appearance due to the passage of a supernatural being, or betokening a message from such things. The modern world view separates the human from the natural realms, with mind, morality, and society unique to the human sphere, while amoral forces operate with machinelike regularity in the natural sphere.

No such strict separation characterized the supernatural world view. Natural objects possessed animate properties, and an invisible world of gods, spirits, and demons interacted with the physical world on an everyday basis. Mind, emotional sympathy, and moral obligation bound the human and nonhuman realms together in a tight whole. The very structure of the universe had an intimacy forgotten today. A tripartite cosmology of an upper or heavenly realm of the gods, a middle level of earth where mortals lived, and an underworld of the dead or malevolent spirits located the three levels in close proximity. Mountains and caves provided access from one level to another, and a sacred tree might have roots in the underworld even as its branches reached into heaven. The otherworld always bided just around the corner. Traffic between here and there was so commonplace that a human might encounter the supernatural at any step.

Interactions between humans and the supernatural otherworld could happen through direct contact, when gods descended to earth or ghosts appeared to the living, or through visions, a form of direct contact in nonphysical mode. Visionary tours of heaven and hell created an extensive literature in Jewish, Christian, and Islamic traditions. Apparitions offered another type of supernatural manifestation, more substantial than visions but less than fully physical. The term often applies to appearances of the Virgin Mary, a complex type of encounter prominent from medieval times to the present. A broad collection of appearances covering the most UFO-like aerial phenomena is the "signs and wonders" category. Sights of this type qualified as both unusual and meaningful, bearing a message from the gods to reveal their displeasure or future intentions. The ancient Romans recognized prodigies, portents, and omens as signs of divine will, some with social, others with purely personal significance, and Christian writers adopted these concepts under the collective term of "divine providences."

Signs and wonders could mean events as simple as a horse stumbling, as natural as lightning striking a church steeple. Natural disasters like an earthquake or hailstorm readily suggested divine anger or supernatural malice. In a time when close ties between the human and nonhuman realms were taken for granted, any

event seemed to convey meaning. Of all such events, the most spectacular, most recorded, and most puzzled-over prodigies were the celestial anomalies. The skies might proclaim the uniqueness and importance of certain individuals, with a new star announcing the birth of a divine being or a comet proclaiming the death of a king. Comets, swords appearing in the air, or bloodlike lights in the sky have long been regarded as death omens. Signs like a ship sailing in the air sometimes indicated a disaster at sea, but such appearances did not always herald gloomy tidings; they might arouse nothing more than a sense of wonder from observers and recorders.

People described similar anomalies throughout the long era of supernatural UFOs, whether the time was Roman antiquity, the Middle Ages, or the seventeenth century, the place Europe, China, Japan, Babylonia, or Islamic countries. The Babylonians compiled books of omens as far back as 1000 B.C. The Chinese and the ancient Egyptians also recorded unusual astronomical phenomena over the centuries. Some tantalizing stories sprinkle ancient mythology, such as the Egyptian myth that the sun god Ra lived on earth and ruled the people until his subjects turned against him and set up an ambush as he sailed the Nile. Ra's son Horus heard of this plot and assumed the form of a brilliant flying disc to attack the rebels, but Ra did not allow all humans to be killed. He then departed the earth and thereafter sailed only the celestial Nile.

Our knowledge of observations and beliefs is most comprehensive for European history. The ancient Greek historians paid little attention to prodigious events, but Roman historians such as Livy and Dio Cassius were much better disposed to recording strange aerial events along with more mundane affairs. The Romans divided into believers and skeptics. The believers accepted prodigies as matters of utmost concern and carried out purification rituals as needed, whereas the orator and statesman Cicero represented the attitude of a questioning elite when he condemned a willingness to see an omen in every happenstance and ridiculed his countrymen who believed that Jupiter would communicate his will through the cackling of chickens. Yet faith in prodigies persisted among the literate and presumably thrived among the common people. The name of **Charles Fort** (1874-1932) now attaches to aerial lights, falling fish, black snows, and other "Fortean" phenomena, but he had a predecessor as early as A.D. fourth century, an obscure Roman writer named Julius Obsequens, who compiled a book of similar accounts drawn from Livy's history. In the latter days of the Empire, these happenings had become matters of independent interest.

The Middle Ages began with the fall of the Roman Empire in the fifth century. Christianity had already become the dominant religion, and Church Fathers such as Augustine and Orosius adopted Roman prodigies as valid occurrences. Aerial crosses became numerous, and angels replaced flying gods, but pagan anomalies continued largely unchanged in a Christian world. Monastic writers chronicled the history of their time in lists of significant events with little interpretation or commentary. This form of historical record was ideal for preserving strange events, and

the chronicles of Matthew Paris or Roger of Wendover mingle many sights in the sky alongside deeds of the king or happenings of the Crusades. Theologically minded writers accepted prodigies as forerunners of the end of the world, but they also looked with caution on such sights as possible deceits of demonic powers or, with a skeptical sophistication to belie the popular impression that the entire period was a long dark age, regarded aerial phenomena as part of God's natural order not understood by man.

Plague, war, and religious uncertainty in the fourteenth and fifteenth centuries cultivated fertile ground for supernatural belief. Marian apparitions increased, fears of witchcraft intensified, and apocalyptic expectations lent new urgency to signs in the sky. The great harvest of supernaturalism followed in the sixteenth and seventeenth centuries during the Protestant Reformation and the resulting religious wars. With old certainties upset, fear sharpened interest in anything supernatural.

Hermann Schaden's sketch of a flaming celestial object that appeared in Germany in 1493. (Fortean Picture Library)

Leading religious figures such as Martin Luther reaffirmed that signs must precede the end of the world, and Puritan belief fostered awareness of the supernatural by emphasis on a daily struggle between God and Satan in the worldly arena. The invention of the printing press in the fifteenth century enabled dissemination of topical news at an unprecedented rate and favored the vernacular languages. Readers wanted sensational rumors and stories, and publishers were glad to oblige.

Rediscovery of the prodigy book of Obsequens in 1508 set off a flood of similar works. The most comprehensive was the *Prodigiorum ac Ostentorum Chronicon of Conrad Lycosthenes*, which appeared in 1557 at Basel. The author declared his ambition to record every prodigy that had appeared from the beginning of the world to his present day, combing the Bible, ancient histories, medieval chronicles, and recent sources for "Fortean" items. His English translator, Stephen Bateman, entered into the spirit of the enterprise by updating the chronicle to 1581 and adding materials from sources unavailable to Lycosthenes. Bateman took seriously the apocalyptic mission of prodigies and gave his book an alarming title: *The Doome Warning All Men to the Judgment.*

One of the most noteworthy English collections appeared in three installments during 1661 and 1662, titled *Mirabilis Annus*, or the Year of Prodigies and Wonders. The Protestant theologian John Calvin said that miracles occurred every day, hoping thereby to discourage undue popular interest in them, but his words had the opposite effect on the anonymous author of *Mirabilis Annus*. This writer set out to prove Calvin literally correct by gathering enough prodigious events of the air, land, and sea to prove that they did indeed happen almost daily. God so often favored the Puritan cause in these pages that the Royalists accused the author of fabricating his prodigies for political ends and sought without success to arrest him.

Book-length collections by Johann Wolf and Johannes Pretorius appeared in Germany, by Pierre Boaistuau and Simon Goulart in France. English readers could turn to E. Fenton's *Certaine Secrete Wonders of Nature* (1559), John Vicars's *Prodigies and Apparitions, or England's Warning-Pieces* (1642), John Gadbury's *Natura Prodigiorum* (1660), or Nathaniel Crouch's *The Surprizing Miracles of Nature and Art* (1683). From America the Puritan minister Increase Mather published *An Essay for the Recording of Illustrious Providences* (1684), and his witch-hunting son Cotton the *Magnalia Christi Americana* (1702). An even larger literature consisted of shorter works with titles like *Strange News, or the Historie of Strange Wonders* (1561), *Looke up and See Wonders* (1628), and *The Warnings of Germany*(1638), a list of dire warnings accompanying the Thirty Years' War. Most common of all were pamphlets a few pages long detailing "Strange News" of some recent incident to readers.

If this literature reflected the learned side of beliefs about aerial anomalies, the common people held a bounteous store of their own in folklore. Collecting of these accounts began in earnest only in the nineteenth century, leaving questions about how closely learned and popular beliefs compared during the age of supernatural UFOs. The fact remains that medieval chroniclers like Giraldus Cambrensis

and Gervase of Tilbury referred to fairies or ghostly manifestations little different from later folklore, and Reformation-era writers on ghosts and witchcraft included many familiar folklore motifs. The luminous phenomena associated with fairies, spirits, and death omens seem largely unchanged for hundreds, perhaps thousands, of years.

Reports of aerial anomalies from the supernatural era. Most pre-1800 reports describe familiar astronomical or meteorological phenomena with nothing more mysterious about them than a quaintness of terminology. Comets, meteors, parhelia, and aurorae attracted the interest of chroniclers whether in Rome, England, China, or Persia. Stars with broom-tails, torches flashing through the sky, fiery appearances in the night, or multiple suns comprise most of the oddities recorded, and betray their natural identities with transparent ease.

Other appearances evolve into complex apparitions too fantastic to believe. Livy says that in 214 B.C. at Hadria, "an altar appeared in the sky with men in white robes standing around it." While the Romans besieged Jerusalem in A.D. 70, Josephus reports that before sunset "there were seen in the sky . . . chariots and regiments in arms speeding through the clouds." From Japan in 643, "five colored banners and umbrellas shone in the sky, and descending, hung over the Temple to the sound of various music." Dunstable, England, 1188: "The heavens opened . . . a cross appeared, very long and of wonderful magnitude, and it appeared as though Jesus Christ was fastened thereon with nails, and crowned with thorns," according to the *Annals of Roger de Hoveden*. One of history's most famous apparitions appeared in 312 to the Roman Emperor Constantine, then a pagan, who according to Church historian Eusebius saw a cross in the sky with an accompanying inscription that read, "In this sign, conquer." Swearing allegiance to Christ, Constantine won his battle and became the first Christian emperor. Some Reformation-era writers described scenes of aerial battles with such elaborate attention to arms, armor, horses, artillery, and maneuvers that an epic movie seemed to play out against the sky.

Sights in the sky often accompanied important events and personages on earth. Plutarch tells that a bright flame issued from heaven to hover over the ship of the Greek commander Timoleon in 343 B.C., and this fire guided the ship to its destination. A cometlike appearance with the shape of a dragon heralded the birth of King Arthur, according to Geoffrey of Monmouth. Over many nights while the Turks besieged Constantinople in 1453, "a fire descended from the sky, stood over the City, and enveloped her with light all night long." This sign of God's favor for the Christians depressed the sultan, and he prepared to withdraw; but the light ceased to appear, and the Turks took heart, believing they had God on their side at last.

Many accounts of aerial phenomena accompany the presence of gods or saints. Biblical accounts include the pillar of fire and pillar of cloud that guided the Israelites out of Egypt, a fiery chariot that took the prophet Elijah into heaven, Ezekiel's vision of the wheel, the Star of Bethlehem, and the ascension of Jesus into a cloud. Saints' legends are rich in supernatural lights. According to the *Life of St. Columba*, a priest found his house illuminated by a bright light and discovered a

ball of fire above the face of Columba, then a little boy, as he lay asleep. When Columba died in 579, an immense pillar of fire appeared in the east and ascended. In the Indian *Mahabarata* epic, a light arose from Krishna as he died, while angel-like spirits conducted him to heaven. Legends of the saints are so widespread and standardized that the anomalies appear more like folkloric motifs, for writers to include as an expected part of the story, rather than reports of genuine events.

Fiery appearances sometimes take on spectacular characteristics, though their nature remains obscure. Bateman recounts a great star seen in France one night in 1537. This star spread out little by little until it "took the form of a whitish circle, whereof afterwards through a great violence of the wind flames were rained upon the earth," and burned many things. He also tells of a case in 1194 when ravens "of huge greatness flying in the air from place to place, were seen to carry in their bills . . . burning coals, with which they set houses on fire." This legend of ordinary or monstrous birds carrying fire appears in Pliny, Dio Cassius, Obsequens, and several medieval chronicles.

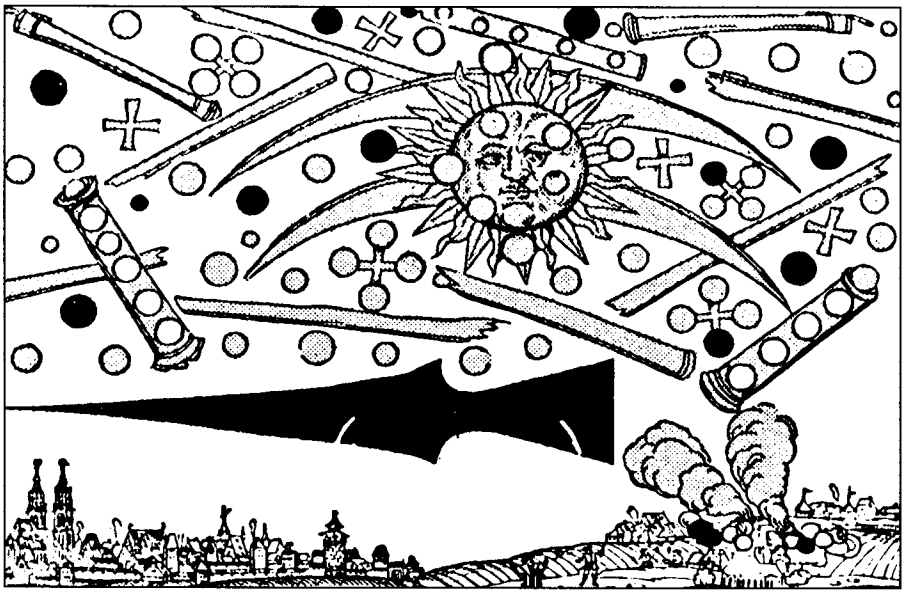
Another mysterious fire is the wildfire, a term for runaway brushfires or even gunpowder in Elizabethan times but also indicative of a recurrent and mysterious phenomenon. The *Anglo-Saxon Chronicles* note outbreaks several times during the eleventh century but give little hint about its appearance or nature. Florence of Worcester says of the occurrences of 1048 that "the wild fire, which none did understand, killed many men and animals all over England. . . . There came fires in the air, commonly called 'woodland fires', which destroyed towns, standing corn in the fields." Geoffrey Gaimar's *History of the English* gives an even more intriguing portrait—a fire burned in the air, then descended to earth to burn woods and plains before revolving upward into the air again and falling into the sea. Another outbreak in 1693-94, reported in Camden's *Brittania* and John Evelyn's diaries, began as a "fiery exhalation" arising out of the sea, spreading in breadth, and traveling inland where it burned straw, hay, and grass, but not trees. According to some reports, the fire was a weak blue flame. A letter to the *London Times* on October 5, 1877, reported mysterious lights moving inland from the sea in Wales, and even as late as 1953, mysterious fires occurred in the same area.

Numerous folkloric accounts describe luminous phenomena associated with death omens, ghosts, witches, and the will-o'-the-wisp, while fairy sightings sometimes bring to mind accounts of UFO landings and occupants today. Prodigy collector Nathaniel Crouch writes in *The English Empire in America* that the Indians observe a flame over their wigwams before a death occurs. In about 1680 "I was called out once about twelve a clock . . . and plainly perceived it mounting into the air over a church. . . . You may certainly expect a dead corpse in two or three days." Smaller lights called "corpse candles" appeared in Wales to announce a death, often following the course a coffin would take a few days later in the funeral. Holinshed's *Chronicle* contains an account characteristic of another type of supernatural light, the will-o'-the-wisp, though its wide distribution and long duration, over November and December 1394, set this case apart from the usual appearances: "A certain thing

appeared in the likeness of fire in many parts of . . . England . . . every night. This fiery apparition, oftentimes when anybody went alone, it would go with him, and would stand still when he stood still," but when many people traveled together, the object stayed far off. "To some it appeared in the likeness of a turning wheel burning; to othersome round in the likeness of a barrel, flashing out flames of fire at the head; to others in the likeness of a long burning lance."

Ghostly lights haunted Boston Harbor in 1644, according to John Winthrop: "About midnight three men . . . saw two lights arise out of the water . . . in form like a man, and went a small distance . . . and were vanished away." A week later two moonlike lights arose, neared one another, separated, then neared again, repeating this motion until they vanished beyond a hill. The appearance occurred near the place where a ship blew up not long before. After a greedy man died in Japan in 1686, a fiery ball flew from his village to a place where many oil lamps burned. Shots and arrows fired at the specter had no effect, and one man who drew close to it saw a furious human head blowing fire from its mouth. A case of witchcraft from Cotton Mather tells of a man who saw a light the size of a half-bushel and struck it some 40 blows with a stick, feeling a palpable substance. Something threw him onto the ground, and he had difficulty finding his way home, but the next day a neighbor woman and suspected witch "was in a miserable condition" as though she had been struck with many blows.

Accounts of a furious supernatural host rushing through the air, most often known as the Wild Hunt, is common in the folklore of northern Europe. Lights in some form usually accompany this apparition, either a lantern or the fiery eyes of dogs and humans or the flaming breath of horses. Sometimes the Hunt swoops



This illustration from a Nuremberg, Germany, broadsheet depicts an aerial event witnessed on April 14, 1561. (Fortean Picture Library)

down and abducts a night traveler and leaves him at some distant place, often deprived of a finger and his senses. A bright light seen in the air over western Germany in the 1850s or 1860s was called the "Devil's Army," probably a synonym for the Wild Hunt, and in 1897 some German immigrants in Iowa connected this appearance with the headlight reported in phantom airship sightings then current.

Fairylore parallels many UFO phenomena, from simple accounts of flying lights to **abductions** and visits to an otherworldly fairyland. Most fairy legends date from nineteenth- or twentieth-century collections, but medieval records contain some of these stories. Giraldus Cambrensis reports that green fairy children once appeared from the underground fairy world, and he tells the story of Elidurus, a boy who found the entrance to fairyland and visited there as a guest, seeing that it had a bright sky but no sun, like the otherworld sometimes described by abductees. One much later report from the Isle of Man gives an eyewitness account of a man traveling home at night when he saw a circle of supernatural light; coming in twos and threes he saw "a great crowd of little beings smaller than Tom Thumb and his wife. . . . They moved back and forth amid the circle of light, and they formed in order like troops drilling." An especially UFO-like fairy legend is the rock, hill, or prehistoric burial mound that rises on pillars some nights during fairy festivities. Brilliant light streams out from underneath, and little beings dance around inside—but any mortal who joins them for what seems an hour or so may return home only to find that 40 years or more have passed, a motif known as the "supernatural lapse of time in fairyland." Two collectors of English fairylore heard a story about a man who came upon a party of fairies one night and hid to watch unobserved. The fairies soon discovered him, then hurried up a ladder stretching from the ground into a cloud. When they all reached the top, they pulled up the ladder and closed the cloud.

For all the lights or apparitional forms in the pre-1800 literature, some reports describe actual aerial vehicles. Ezekiel's wheel was "a wheel in the middle of a wheel. When they went, they went upon their four sides, and they turned not when they went" (Ezekiel 1:4-17). The Indian *Ramayana* epic includes many references to aerial chariots, "a silver car with weapons hung in racks that shone like lanterns . . . with many fan-blades spinning and silver blades all flashing." Ships in the air figure in Livy's history of Rome for 218 and 173 B.C., but they especially favored Irish skies. As worshippers emerged from a church, they found a ship's anchor hooked in an arch of the building and saw a man descend the rope as if he swam underwater from the ship above. Before the man could free the anchor, the people seized him, and he seemed about to drown until the bishop ordered him released. He swam through the air back up to the ship, and the crew cut the rope. Gervase of Tilbury retells the same story but locates it in England.

UFO-like phenomena. Few pre-1800 anomalies resemble modern UFOs, and genuine unknowns are fewer still. Saucer-shaped objects are exceptionally rare. The Roman writer Pliny says that in 100 B.C. "a burning shield" darted across the sky over Rome at sunset, throwing out sparks, and Obsequens reports an almost identical object.

These objects are probably meteors. A more impressive report from chronicles of Charlemagne's time tells that the German Saxons revolted against the Franks in A.D. 776. As the Saxons stormed the castle at Syburg, on to the Ruhr, a great number of people inside the walls and out "saw the likeness of two shields red with flame wheeling over the church." The Saxons fled in terror on seeing this "miracle."

Other accounts of potentially meteoric UFOs are puzzling, if not very convincing. Livy records that a big rock flew through the air at Reate in 212 B.C. Gregory of Tours notes for A.D. 590 that a light illuminated wide areas in the middle of the night as if it were high noon, and on several occasions fiery globes traversed the sky at night and lighted up the earth. Bateman says that "a ball of black color [went] with a great violence, from amid the moon towards the north," over Halberstadt, Saxony, on April 24, 1546.

The motions of some apparent meteors lend them an unconventional quality. A writer named Daimachus tells of a stone that fell from the sky at Aegos Potami at the time of a battle in 405 B.C. Before the stone fell, it was seen as a vast fiery body in the sky for 75 days, "as if it had been a flaming cloud, not resting, but carried about with several intricate and broken movements." Plutarch adds that "Daimachus needs to have indulgent hearers," if his account is to gain credit. A Chinese general in A.D. 235 watched a red meteor with pointed rays move to and fro three times above his camp, growing in magnitude with each passage, while a Vietnamese record from 1276 tells of a combat between two stars, with the loser falling as a meteor.

The following records recount even stranger phenomena: Spoletum, 91 B.C.: Obsequens says that a "gold-colored fireball rolled down to the ground; increased in size, it seemed to move off the ground towards the east, and was big enough to blot out the sun." Ball lightning might explain this appearance, also another from Bateman, coming from Erdford, Germany, in 1520: "[T]here were seen two suns, and a burning became of a wonderful greatness in the element, which falling down upon the ground destroyed many places. Turning from thence to the air, it put on a round form." He tells of a similar German prodigy in 1543: In the afternoon, "a great comet was seen . . . from whence a fire descending to the earth like a dragon, drunk clean up the brook that was next unto it, from thence flying into a field, consuming a great part of the corn, and mounting up again left behind horrible tokens of these things to be seen."

From *Mirabilis Annus* comes a "landing" report from Hertfordshire in 1660: Three persons traveling before dawn "were on a sudden smitten with a ... terrible flash of lightning; after which the air continued very light." They thought a house was on fire but soon saw "the fire in a great body to ascend, and the sky opening to receive it; and as it went up, three stars ... fell down from it perpendicularly." Some part of the fire in the sky then assumed a sickle shape and remained visible till daylight. A Chinese account from between 1056 and 1063 says that a large "pearl" appeared night after night, emerging first from some swamplands, then

shifting its activities to a nearby lake and later to another. The author received a letter from a friend, saying that one night the pearl appeared nearby over the lake. A door opened in the pearl, and a bright light shone out from inside; trees over a wide area cast shadows. The pearl then flew off into the distance.

Seemingly straightforward auroral or halo phenomena may also include some curious movements. The *Anglo-Saxon Chronicles* for 979 note that witnesses often saw "a bloody cloud, in the likeness of fire; and ... it was most apparent at midnight, and was colored in various ways. Then when it was about dawn it glided away." Roger of Wendover states that at York in December 1200, five moons appeared, one in each quarter of the sky and one overhead. Stars accompanied this fifth moon as it made the circuit of the other four, repeating this motion five times over an hour, "to the wonder of many who beheld it."

In other cases distortion or exaggeration magnifies what is likely to be a natural, though perhaps unusual, manifestation of nature. A large red aurora appeared over Switzerland and Germany on December 30, 1560, but many reports of prodigious events associated with this display reached Joachim Camerarius. In one case there appeared a fiery globe in which a bear and a lion seemed to fight. In another place a globe of fire flew so near the housetops that people feared their houses would burn. Naima's *Annals of the Turkish Empire* reports a black, circular cloud over Hungary one afternoon in 1617. Blood dropped like rain from this cloud. Then a tremendous burst of thunder sent cattle fleeing in all directions, and fiery crosses appeared inside the cloud.

The passing and persistence of the supernatural era. If supernatural credulity reached high tide during the Reformation era, an undercurrent of scientific understanding also began to strengthen. A tension had long endured between belief in divine messages and awareness that the messengers were natural phenomena, uncommon perhaps, but regular in action and in no sense miraculous. The solution was a concept of dual causality. Prodigies were natural phenomena and in no sense a violation of nature, but they also related as meaningful tokens to earthly events. This relationship could be causal, as when the Hellenic astronomer Ptolemy explained comets as the result of an overabundance of the element of fire in the upper atmosphere. The same excess that lighted the sky also heated the human spirit to a greater lust for war. Hence comets were both natural phenomena and heralds of strife. Augustine explained the apparition of an aerial battle as the work of demons as they tried to fire up a similar lust.

The relationship might be indicative, a genuine divine message as God used natural processes to forewarn humans of impending disaster, or merely associative, the sort of happening that occurred along with other events worthy of mention but unconnected with them. By 1697, when William Turner published his *Complete History of the Most Remarkable Providences*, the supernatural side of dual causality had attenuated enough for prodigy to become synonymous with any sort of remarkable event. Turner clumped feats of human engineering together with strange

sights in the sky as equal proofs of God's providence. Faith in the supernatural was clearly on the wane.

A growing community of scientific rationalists in the seventeenth century fostered a strictly natural interpretation of aerial phenomena. The English writers Polydore Vergil and John Spencer followed Cicero and argued against the reality of supernatural manifestations, while Edmund Halley's determination that the comet now bearing his name followed a regular orbit drew these most dreaded of prodigies fully into the natural sphere. The founding of organizations like the Royal Society ushered in the second age of "UFO" beliefs, characterized by naturalistic anomalies.

Though the eighteenth century was a time of conceptual transition, naturalistic anomalies replaced supernatural prodigies only by slow degrees. Phantom armies continued to march, at Souter Fell in England during 1735 and on several other occasions; at Chimney Rock, North Carolina, on August 7, 1806, and again in 1811. Even in the nineteenth and twentieth centuries these apparitions persisted, with the *New York World* publishing an account on April 24, 1887, of divisions of infantry seen in the air over Hungary, with the scarlet caps of the soldiers and the flashing sword of the leader visible to the onlookers, who feared the outbreak of a war. A legend arose after the Battle of Mons in 1914 that angels or fifteenth-century bowmen had fought for the British. When the German Field Marshal von Hindenburg died in 1934, "the gray soldiers of the World War appeared in the clouds," by one account, "to give their dead field commander an escort to Tannenburg. . . . In all East Prussia the gray army was clearly and plainly seen."

Samuel Coccius's illustration of mysterious black globes in the sky over Basel, Switzerland, on August 7, 1566. (Fortean Picture Library)

Supernatural lights also continued to illuminate religious gatherings. During a revival in Ireland in 1859, before several open-air crowds of 600 to 1000 persons each, "a kind of cloud of fire approached in the air, hovered and dipped over the people, rose and floated on some distance, again hovered on ... another revival meeting, and so it continued." The Welsh revivals of 1905 produced many reports of lights or balls hovering around the assemblies but especially near one of the leading evangelists, Mary Jones. Apparitions of the Virgin Mary at Lourdes and other sites were numerous in the nineteenth century, while a spectacular series of apparitions occurred at Fátima, Portugal, in 1917. These appearances culminated on October 13 when some 50,000 witnesses saw the sun turn pale, spin on its axis, and seem to fall from the sky. In recent years a well-publicized series of Marian apparitions have occurred at Medjugorje, Yugoslavia.

The beginning of naturalistic anomalies. Eighteenth-century rationalists described many of the same sights their predecessors found unusual, the only difference being that the objects were now natural anomalies divested of any supernatural connotations. A witness reported to *Philosophical Transactions* (43:524-25) a meteor over London on December 16, 1742. This meteor was unusual because it neither looked nor acted as a meteor should—it moved parallel to the horizon, undulated in flight, and remained in sight for half a minute. Moreover, the fiery head was as large as the full moon and seemed surrounded and bisected by a dark frame "like bands of iron."

Other anomalies without precedent in the prodigy literature accumulated alongside the growing body of conventional scientific knowledge. On August 9, 1762, a Swiss astronomer saw through his telescope a large, spindle-shaped body crossing the face of the sun. "This spindle kept continually advancing on the sun's body, from east towards west, with no more than about half the velocity with which the ordinary solar spots move; for it did not disappear till the seventh day of September." Another observer some distance away saw the object, but it crossed a different segment of the sun, indicating that the body was located somewhere between the earth and the sun. Items such as these, gathered in the course of scientific observation with the tools of science, but at odds with the scheme of scientific understanding and thereby excluded or ignored, joined the lengthening "procession of the damned" that Charles Fort would gather and speculate about early in this century.

Modern uses of pre-1800 anomalies. Ufologists have long wondered if the phenomenon truly began with the Kenneth **Arnold sighting** in 1947. They adopted phantom airships and many other strange objects reported in earlier times, persuasive or not, as evidence that UFOs enjoyed an age-old pedigree and startled observers long before any airplane or satellite existed to clutter the sky with false alarms. Desmond Leslie's chapters in *Flying Saucers Have Landed* (1953) and Harold T. Wilkins in *Flying Saucers on the Attack* (1954) drew on medieval and other early reports to argue that aircraft and balloons could not explain all reports. Astronomer **Donald H. Menzel** turned to old reports in *Flying Saucers* (1953) for the opposite

reason: to demonstrate that people had always seen mysterious objects in the sky, and just as future understanding accounted for those reports, conventional solutions would soon lay flying saucers to rest.

These two opposing arguments have locked in struggle throughout modern ufological history. The notion that prehistoric alien visitors brought the secrets of culture to primitive humans inspired science-fiction writers for decades, and the Shaver mystery—Richard S. Shaver's stories of advanced ancient races still hiding underground—enjoyed considerable popularity on the eve of the modern UFO era, under the sponsorship of Ray Palmer, then editor of *Amazing Stories* and later an important early advocate of flying saucers. UFO writers George Hunt Williamson and Brinsley le Poer Trench specialized in ancient-visitation speculations through the 1950s and early 1960s.

The true heyday of the "ancient astronaut" movement lasted from the late 1960s till the mid-1970s, after Erich von Däniken's books popularized the idea that superscientific alien visitors built the Great Pyramid and other architectural wonders of antiquity. A trendy literature of dismally researched and reasoned books followed von Däniken's success. Only W. Raymond Drake's *Gods and Spacemen* series reflected any extensive erudition and included prodigies as evidence for long-term visitation. NASA engineer Josef F. Blumrich's *The Spaceships of Ezekiel* (1974) offered a creative but misplaced effort to translate the metaphoric biblical account into a properly engineered spacecraft.

All in all, pre-1800 aerial anomalies amount to natural phenomena seen through pre-scientific eyes. Few of these reports resemble modern UFOs, and few offer any genuine strangeness. Our ancestors recorded odd sights aplenty, but their descriptions confirm only the constancy of human interest in aerial mysteries, not evidence that aliens have flown earthly skies for hundreds or thousands of years. Or to read the evidence another, equally legitimate way, too many layers of belief, interpretation, terminology, and tradition obscure the residue of unidentified cases for anyone at this late date to declare with certainty that people in the distant past witnessed the same UFO phenomenon we know today. —*Thomas E. Bullard*

Sources:

Buck, William. *The Ramayana.* New York: New American Library, 1978.

Eusebius. *History of the Church.* New York: Penguin Books, 1965.

Evans-Wentz, W. Y. *The Fairy-Faith in Celtic Countries.* New York: University Books, 1966.

Grey, E. Howard. *Visions, Previsions and Miracles in Modern Times.* London: L. N. Fowler and Company, 1915.

Himmelfarb, Martha. *Tours of Hell.* Philadelphia, PA: University of Pennsylvania Press, 1983.

Ho Peng-Yoke. *The Astronomical Chapters of the Chin Shu.* The Hague, Netherlands: Mouton, 1966.

————. "Natural Phenomena Recorded in the Dai-Viet Su'-Ky Toan-Thu', an Early Annamese Historical Source." *Journal of the American Oriental Society* 84 (1964): 127-49.

"A Journey to Caudebec Falls." *Gentleman's Magazine* (1747).

McClure, Kevin, and Sue McClure. *Stars, and Rumours of Stars.* Market Harborough, Lancashire, England: The Authors, 1980.

Machen, Arthur. *The Angels of Mons.* London: Simpkin, Marshall and Company, 1915.

Mair, Victor M., ed. *Columbia Anthology of Traditional Chinese Literature.* New York: Columbia University Press, 1994.

Melissinos, Makarios. "Chronicle of the Siege of Constantinople." In Georges Phrantzes's *Fall of the Byzantine Empire*, 97-136. Amherst, MA: University of Massachusetts Press, 1980.

Meyer, Kuno. "Irish Mirabilia in the Norse 'Speculum Regale'." *Eriu* 4 (1910).

"Natural History: An Account of a Very Singular Phenomena [sic] Seen in the Disk of the Sun, in Different Parts of Europe, and Not in Others." *Annual Register* 9 (1766).

Newman, L. F., and E. M. Wilson. "Folklore Survivals in the 'Lake Counties' and in Essex." *Folk-Lore* 63 (1952).

Newton, George. "Shining Figures on Chimney Rock." *North Carolina Folklore* 8,1 (July 1960).

Pohl, Erich. *Die Volkssagen Ostpreussens.* Hildesheim, Germany: Georg Ohms Verlag, 1975.

Scholz, Bernhard Walter, ed. *Carolingan Chronicles.* Ann Arbor, MI: University of Michigan Press, 1970.

Thomas, Keith. *Religion and the Decline of Magic.* New York: Charles Scribner's Sons, 1971.

Visser, M. W. de. "Fire and Ignes Fatui in China and Japan." *Mitteilungen des Seminars für Orientalische Sprachen Berlin* 17 (1914).

Walsh, William. *Our Lady of Fátima.* Garden City, NJ: Doubleday and Company, 1954.

Wilkins, Harold T. *Flying Saucers on the Attack.* New York: Citadel Press, 1954.

Zaleski, Carol. *Otherworld Journeys: Accounts of Near-Death Experience in Medieval and Modern Times.* New York: Oxford University Press, 1987.

AREA 51.

→*See* **Men in Black.**

ARNOLD SIGHTING

The age of flying saucers began on Tuesday, June 24, 1947, just before three o'clock in the afternoon. The man responsible was a respected private pilot and fire-control-equipment salesman named Kenneth Arnold, of Boise, Idaho.

Arnold had spent the earlier part of the afternoon installing equipment at the Chehalis, Washington, Central Air Service, where he learned of a $5000 reward for the discovery of a C-46 Marine transport that had gone down in the mountains. Arnold was on his way to Yakima but decided to take a side trip to Mount Rainier, site of the crash, in hopes of sighting the wreckage.

In the course of the search, he took a 180-degree turn over Mineral, Washington, and was alarmed by a "tremendously bright flash," apparently in front of him. Fearing he was about to collide with another aircraft, he searched frantically through the sky for the next 20 to 30 seconds. All he could see was a DC-4 far to his left and rear. Then he spotted another flash. Looking to his left and to the north, he found the source: a formation of bright objects moving roughly south

reason: to demonstrate that people had always seen mysterious objects in the sky, and just as future understanding accounted for those reports, conventional solutions would soon lay flying saucers to rest.

These two opposing arguments have locked in struggle throughout modern ufological history. The notion that prehistoric alien visitors brought the secrets of culture to primitive humans inspired science-fiction writers for decades, and the Shaver mystery—Richard S. Shaver's stories of advanced ancient races still hiding underground—enjoyed considerable popularity on the eve of the modern UFO era, under the sponsorship of Ray Palmer, then editor of *Amazing Stories* and later an important early advocate of flying saucers. UFO writers George Hunt Williamson and Brinsley le Poer Trench specialized in ancient-visitation speculations through the 1950s and early 1960s.

The true heyday of the "ancient astronaut" movement lasted from the late 1960s till the mid-1970s, after Erich von Däniken's books popularized the idea that superscientific alien visitors built the Great Pyramid and other architectural wonders of antiquity. A trendy literature of dismally researched and reasoned books followed von Däniken's success. Only W. Raymond Drake's *Gods and Spacemen* series reflected any extensive erudition and included prodigies as evidence for long-term visitation. NASA engineer Josef F. Blumrich's *The Spaceships of Ezekiel* (1974) offered a creative but misplaced effort to translate the metaphoric biblical account into a properly engineered spacecraft.

All in all, pre-1800 aerial anomalies amount to natural phenomena seen through pre-scientific eyes. Few of these reports resemble modern UFOs, and few offer any genuine strangeness. Our ancestors recorded odd sights aplenty, but their descriptions confirm only the constancy of human interest in aerial mysteries, not evidence that aliens have flown earthly skies for hundreds or thousands of years. Or to read the evidence another, equally legitimate way, too many layers of belief, interpretation, terminology, and tradition obscure the residue of unidentified cases for anyone at this late date to declare with certainty that people in the distant past witnessed the same UFO phenomenon we know today. —*Thomas E. Bullard*

Sources:

Buck, William. *The Ramayana.* New York: New American Library, 1978.

Eusebius. *History of the Church.* New York: Penguin Books, 1965.

Evans-Wentz, W. Y. *The Fairy-Faith in Celtic Countries.* New York: University Books, 1966.

Grey, E. Howard. *Visions, Previsions and Miracles in Modern Times.* London: L. N. Fowler and Company, 1915.

Himmelfarb, Martha. *Tours of Hell.* Philadelphia, PA: University of Pennsylvania Press, 1983.

Ho Peng-Yoke. *The Astronomical Chapters of the Chin Shu.* The Hague, Netherlands: Mouton, 1966.

————. "Natural Phenomena Recorded in the Dai-Viet Su'-Ky Toan-Thu', an Early Annamese Historical Source." *Journal of the American Oriental Society* 84 (1964): 127-49.

"A Journey to Caudebec Falls." *Gentleman's Magazine* (1747).

McClure, Kevin, and Sue McClure. *Stars, and Rumours of Stars.* Market Harborough, Lancashire, England: The Authors, 1980.

Machen, Arthur. *The Angels of Mons.* London: Simpkin, Marshall and Company, 1915.