

Brightness and color changes are also noted, and while the sample is small (82 cases) NICAP found the following: Of the 25 cases showing a change in brightness, 23 of the changes occurred at the moment of a velocity change (a change of either magnitude or direction). Concerning the change of color, 23 cases showed a color change related to acceleration. While the supporting data are not conclusive, it appears that the spectral shift is to the red upon acceleration.

It should also be noted that UFOs reported at night have only a star-like appearance unless very close. Distant UFO's sometimes turn off and on. When closer to the observer, reports often indicate a number of lights, located at the top and around the rim usually. Sometimes the lights flash on and off or change color rhythmically. Several cases have been reported of the UFO flashing its lights in response to the witness flashing hand or vehicular lights. In other cases the lights winked off with the approach of another car or an aircraft, only to turn on again when the vehicle had passed.

While practically any luminous behavior could be produced by someone with sufficient time and money, kinematic behavior at odds with experience or, preferably, at odds with Newtonian behavior are suggestive of non-terrestrial origin.

A common kind of motion is called oscillation by NICAP and is subdivided into "wobble on axis" (frequently described also as fluttering, flipping, and tipping); pendulum motion on slow ascent, hovering and decent (also called "falling leaf motion"); and occasionally a side-to-side oscillation observed as the UFO proceeds horizontally. These motions are most often performed by discs, although examples of similar behavior by other forms also exist.

The last class, that of violent and erratic maneuvers, most clearly lacks an explanation from current physical theory. Using terms like bobbing, erratic, jerky, zig-zag, dark, and shot away, witnesses describe motions involving high angular accelerations and velocities. A number of radar observations appear to substantiate this anomalous behavior. Among the 40 cases showing such characteristics, NICAP finds that 28 percent were reported by scientific or other appropriately experienced personnel.