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A Review of Airplane Encounters with Spherical UAP in French Airspace

Dominique F. Weinstein NARCAP International Technical Specialist - France

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Abstract

A study of 300 UAP cases observed worldwide by civilian and military pilots shows that many of them are described as spheres, or spherical objects. A review of 39 cases which occurred in the French airspace (between 1970 and 2007) however, showed only six cases in which the UAP was described as spherical in shape. A brief analysis of these cases showed that some of them could have had an impact on aviation safety.

1. Spherical UAP Reported by Pilots and Aircrew Members

A recent study¹ of 300 cases of UAP sightings worldwide reported by commercial, military and private pilots shows that the phenomena observed by pilots could be classified in two main groups: luminous phenomena (lights) and objects (when they have a solid or material aspect). The distribution of the 300 cases by general category of phenomenon is given in Table 1.

Objects	206 cases	68%
Lights	92 cases	31%
Unspecified	2 cases	1%

Table 1. Distribution by Type of Phenomenon

In a little more than two third of the cases (68%), UAP observed by pilots and crews are described as objects. These UAP, described as objects, have a variety of shapes. The most often reported shapes are circular (or elliptical) and metallic-looking (spheres, discs). Meanwhile many other shapes were observed, sometimes very strange and against all aerodynamic laws.

¹ A preliminary analysis of 300 UAP cases reported by civilian and military pilots by Dominique Weinstein, 2009, prepared for GEIPAN/CNES. This report has been published in English by NARCAP as International Technical Specialist Report ITR-1, September 2009.

The 206 cases, in which UAP are described as objects, are distributed as follows:

Shape (by group)	No. of cases
1. Circular (14) / Disc (25) / saucer (5) / Round (17)	61
2. Oval (25) / elliptical (1) / egg (2)	28
3. Sphere (15) / balloon (2) / orb (1)	18
4. Cigar (11)	11
5. Missile (5) / rockett (1) / torpedo (1) / fuselage (2)	9
6. half-sphere (2) / inverted bowl (3) / half-moon (1)	6
7. Triangle (3) / Delta (1) / flying wing (1)	5
8. Cylindrical	5
9. Bullett	3
10. Bell	2
11. Cone	2
12. Rectangle	2
13. Changing	1
14. miscellaneous (*)	13
15. unspecified	39

^(*) Crescent, hexagon, lozenge, diamond, inverted V, doughnut, pan-pie, sausage, dark mass, mushroom, pear, tube, elongated.

Table 2. Distribution by Shape

The most frequently reported shape is circular (disc, saucer, round): 61 cases. Then follows: oval-shaped objects (28 cases), spherical objects (18 cases), cigar-shaped objects (11 cases) and missile-like objects (9 cases).

2. Review of Six Spherical UAP Cases Reported in French Airspace

A review of the 39 UAP cases reported by civilian and military pilots which occurred in French airspace (between 1970 and 2007) showed that only in six cases UAP were described as spherical in shape. Concerning the type of aircraft involved the distribution is: private plane (one case), commercial aircraft (two cases) and French Air Force aircraft (three cases).

Case 1

Type: Private aircraft
Date: December 9, 2002
Time: 10h54 GMT

Location: Calais Airfield, France

A pilot instructor with two student pilots took off from Calais airfield (north of France) when they saw coming in front of them toward their aircraft - which heading was 060° and altitude was 200 to 300 meters (900-1000 feet) - a big yellow-white light. The light switched off and the witnesses spotted in the same place a metal-looking sphere. The sphere approached the aircraft during 4-5 seconds then reversed its course going back still on a heading of 060° and disappeared in 2-3 seconds. The pilot radioed Lille Air Control which confirmed that there was no other aircraft on radar in the area. The pilot who was a former military pilot stated that he has never seen such a phenomenon in his 20 years of flying

experience. The total duration of the sighting was 6 to 8 seconds. (Sources: Gendarmerie Nationale Report to GEIPAN-CNES / Weinstein Catalogue case n° 1393)

The phenomenon is described first as a big yellow-white light then as a metal-looking sphere. It is possible that the change was due to the reflection of the sunlight on the sphere which disappeared when the pilot made a turn.

Case 2

Type: Commercial aircraft (Airbus A320)

Date: January 7, 2000 Time: 09h17 GMT

Location: RBT beacon, South of Rambouillet, France

A pilot flying an Air France Airbus A320 at 15,000 feet just over RBT beacon reported an Airprox. Two "balloons", one white and one blue with "metallic objects below" crossed his flight path at a very short distance just below the aircraft. The total duration of the sighting was 7' 59". (Sources: DGAC documents (radio transcriptions and report) / GEIPAN-CNES Files / Weinstein Catalogue n° 1363)

The official investigation conducted by the SEPRA/CNES (French Space Agency) stated that no weather balloon or military balloons were in flight at the time of sighting in this area. According to the author, it could be a balloon of unknown origin.

Case 3

Type: Commercial aircraft (Caravelle)

Date: January 6, 1980

Time: unknown

Location: Phitivier, France

The pilot of an Air France Caravelle (flight AF441) flying at 12,000 ft from Paris Orly to Bordeaux reported a bright sphere of light on the right of his aircraft at a distance of 18 kilometers. The phenomenon, which moved slowly, was seen also by the pilot of another airliner. Paris Radar Control Center (CCR Paris) tracked the phenomenon on its radar. (Sources: SEPRA-CNES Files (radar recording) / Weinstein catalogue case n° 1397)

Case 4

Type: Military aircraft (Dassault-Mirages fighters)

Date: October 15, 2004 Time: 08h14 GMT

Location: Between Lyon and Clermont Ferrand, France

The pilots of a formation of two Mirages of the French Air Force while flying between Lyon and Clermont Ferrand sighted for 15 to 20 seconds a white ball of light which first followed them, and then took a new trajectory in front of the aircraft. The phenomenon was not detected by airborne or ground radar. The information was originally sent by the CCOA (French Air Force operational Command) to the SEPRA at French national space agency (CNES). (Sources: CCOA French Air Force operational Command / SEPRA - CNES / Weinstein catalogue case n° 1401.)

Case 5

Type: Military aircraft (Mirage III-E fighter)

Date: June 17, 1988

Time: night

Location: Saint-Dizier, Haute-Marne, France

During the night, lieutenant Jean-Yves Perret and a second-lieutenant, both flying on Mirage IIIE belonging to the 1/3 Fighter squadron from Nancy-Ochey Air Base 133, operated a night training exercise, flying at Mach 0.9 and at 20,000 feet altitude, they saw a yellow-orange ball, with an apparent diameter of 1 cm at arm's length. The object was not detected on airborne radar nor by ground radar. (Sources: Lumières Dans La Nuit n° 330 / Weinstein catalogue case n° 1212)

Case 6

Type: Military training aircraft (T-33SF)

Date: March 3, 1976 Time: 22h00 GMT

Location: Poitiers area, Vienne, France

A military trainee pilot, from the French Air Force training group 314, was flying on a training night solo flight on a T-33SF jet at an altitude of 6,000 meters and a speed of 460 kph when he saw a sort of green "rocket" climbing vertically in front of him, 1,500 meters above the aircraft then coming down and stabilizing at the plane's altitude. The collision seemed unavoidable, and instinctively the pilot tried to protect himself with his arms. Meanwhile, he saw rapidly but clearly, a glowing green ball (diameter: 1 or 2 meters) which passed at 30 cm (1ft) over his right wing, at head level. This ball was followed by a luminous trail, with the same bright green color. The central part looked white, as blinding as magnesium, with several red spots in its center. When the ball was at its closest position, all the plane was illuminated in green. Contacted by the pilot, the radar station confirmed that no other "traffic" was in the area at that time, except the trainee pilots in their T-33. Back at the Tours Air Base, the pilot learned that the other pilot flying in front of him had also seen the green "rocket", but not the near-collision which followed. The pilot is now a Colonel in the French Air Force. Total duration of the sighting: 5 seconds. (Sources: SEPRA-CNES Files / COMETA Report / Pilot's interview in Lumieres Dans La Nuit (LDLN) n° 331 / Weinstein Catalogue, case n° 1047)

3. Brief Analysis of the Six Selected Spherical UAP cases

Among the six selected cases, the phenomenon is described as spherical lights in four cases (cases 3; 4; 5; 6) and as objects in two cases (cases 1; 2). The four UAP described as lights were all reported by military (M) pilots in three cases (4; 5; 6) and by a commercial (C) pilot in one case (1).

Case	Type of	Description of UAP
	aircraft	
Case 1	P	Metal looking sphere
Case 2	C	Two balloons white and blue
Case 3	C	Bright sphere of light
Case 4	M	White ball of light
Case 5	M	Yellow-orange ball
Case 6	M	Bright green ball of light with white center

Table 3. Description of UAP

The phenomenon was tracked by ground radar only in one case (case 3). Concerning the three military cases, the UAP were not confirmed by ground radar or airborne radar.

The UAP have a "solid" aspect in two cases (1; 2) only. In the other cases (3; 4; 5; 6), it was described as balls of light having various colors (yellow-orange, white, green).

Case	Type of aircraft	Maneuvers of UAP
Case 1	P	Approached aircraft then reversed its course
Case 2	C	Crossed flight path at short distance below aircraft
Case 3	C	Moved slowly at the right side of aircraft
Case 4	M	Followed aircraft then took a new trajectory in front of it
Case 5	M	No maneuver reported
Case 6	M	Climb vertically in front of aircraft then went very close to
		aircraft and stabilized at same level

Table 4. UAP Maneuvers

In cases (1; 2; 4; 6), the UAP could have had an impact on aviation safety. Furthermore in one case (2) the pilot reported an official AIRPROX report. In case 5, due to lack of details, it seems that the UAP was stationary in the sky.

The UAP was very close to aircraft in case (6) estimated distance one foot, and in case (2) it "crossed aircraft's flight path below at a very short distance".

Conclusion

The spherical UAP described in the above brief review are probably from various origin and/or nature. An in-depth study of a large selection of cases should probably give us more information about these phenomena

In some cases, these spherical UAP were seen very close to aircraft and they could have an impact on aviation safety. A scientific study on these phenomena needs to be undertaken.