



SALVADOR FREIXEDO

It will be recalled that on pages 16 and 17 of FSR 36/4 (Winter 1991) I gave an account of the life and work of the former Jesuit priest Salvador Freixedo, who in my opinion is the only researcher who has yet got anywhere near to "sussing out" the realities of this appalling "UFO business". I mentioned briefly the main events in his career and the many very important books (all in Spanish) that he has written, and I described how the ecclesiastical authorities in several Central American countries had systematically persecuted him, how the bishops in Puerto Rico had "suspended his ministry", and how finally he had been imprisoned in Venezuela.

One of his books, issued in Mexico in 1977 and entitled *La Religión Entre La Parapsicología Y Los OVNIs* (*Religion Between Parapsychology and the UFOs*) appeared again later in a new edition and under the new title of *Visionarios, Místicos, Y Contactos Extraterrestres* (*Visionaries, Mystics, and Extraterrestrial Contacts*). Like all the rest of his work, it remained untranslated for years. In the meantime, I had got in touch with the author and he had come to see me, and he made it clear that he wished to see his principal books put into English *by me and, if possible, by nobody else!*

I undertook to make a start on it, and I began translating one of the books that I regard as possibly the most important of all, namely *Defendámonos De Los Dioses!* (*Let Us Defend Ourselves Against The Gods!*) published in 1984 by Editorial Algar S.A. in Madrid. I had done no more than about one-third of it however when a series of things happened that "put paid" to any hope of my ever being able to achieve the job for Sal Freixedo. The first was that owing to the illness of Charles Bowen, I suddenly had to take over the editorship of FSR, and I knew nothing whatever about publishing or editing. The second was that I underwent an extraordinary paranormal experience which would lead in due course to the loss of the sight in one eye. I shall say no more about what this event was, or of who or what lay behind it, although I personally have no doubt as to what the *intention* was. But fortunately we are not entirely without help in this world, and things have turned out for me in such a way that my sight is now almost as good as it originally was. I emphasise that I intend to say no more about this, as I am convinced that we are dealing with very dangerous Forces for whom the existence of Salvador Freixedo and of his books cannot be what one might term "welcome".

As for the present situation of Freixedo, who now lives in Madrid, I am delighted to be able to report that his *Visionaries, Mystics and Contactees* has just been issued (1992) by IllumiNet Press in Georgia, U.S.A., in an excellent translation into English by the American scholar Scott Corrales. (For full details see inside of the front cover of this issue). Need I add that it is my fervent hope that much more of Salvador Freixedo's work will in due course also be rendered into English, and that I deeply regret that I have been unable to keep my promise to do the job myself. In particular, I want to see English-language versions of *Let Us Defend Ourselves Against The Gods!* and of another of his key-books, *Israel - Pueblo Contacto* (*Israel - A Contactee People*). When that day comes you can be sure that an awful lot of fur will begin to fly and the situation may become quite "interesting". ■

BOOK REVIEW

By Paul Whitehead, FSR Director & Consultant

FORBIDDEN SCIENCE: JOURNALS 1957-1969, by DR. JACQUES VALLÉE, 1992. Published by North Atlantic Books, 2800 Woolsey Street, Berkeley, California 94705. (ISBN number 1-55643-125-2-cloth. U.S. price, exclusive of postage and packaging, \$ 24.95).

(The book is sponsored by the Society For The Study of Native Arts and Sciences, a nonprofit educational corporation whose goals are to develop an educational and cross-cultural perspective linking various scientific, social and artistic fields; to nurture a holistic view of arts, sciences, humanities, and healing; and to publish and distribute literature on the relationships of mind, body and nature).

The mystic in Jacques Vallée speaks out in his latest book, *Forbidden Science*. For those of you who have long suspected there is more to this man than mere interest in UFOs, this autobiographical work is a feast to be devoured and enjoyed in modest chunks. Don't read all 453 pages (or, on my estimation, 185,000 words or more) too quickly; there is much here to arrest the attention, amuse, disturb, and finally, to provoke further thought and discussion.

Continued on Page 22

REVERSE ENGINEERING A UFO SIGHTING: WHAT CAN AND CAN'T BE LEARNED?

By Richard F. Haines, FSR Consultant (California) and Gregory Smith © 1991

Dr. Haines, PhD, writes:- "I have pleasure in submitting the enclosed article by myself and one of my colleagues at NASA, Greg Smith.

"We have taken a fairly recent and unreported pilot-sighting and subjected the details of the strange aerial object to the process of 'reverse engineering'. This paper describes the approach, along with the results which we find highly interesting. Others may also want to employ this approach in other cases, and it is this aspect (in addition to the sighting itself) which prompts our submission of it to *Flying Saucer Review*"

Abstract

This paper describes a UFO sighting made by William Lawrence, a pilot flying with a passenger (E.L.) about 7 miles E. of Jackson, California in the Sacramento Valley on April 19, 1989 at 8.30 am local time. The strangely shaped aerial object they saw was in sight for about six minutes. The sighting was subjected to a process known as "reverse engineering" and a number of tentative conclusions were drawn about the object. We conclude that this object was solid and three-dimensional. It was significantly heavier than air and, if the object were obeying known aerodynamic laws, it would have possessed a drag component of about 9 tons and required a propulsive powerplant with an output of at least 25,000 horsepower. Other aspects of the sighting, however, lead to the conjecture that it was not entirely constrained by known aerodynamic principles. In the final analysis, we are unable to distinguish between two rival hypotheses, namely that the object was either of terrestrial manufacture but employing unknown, advanced propulsion technology, or the object was of exotic origin and included a number of features that had the effect of making the object appear to be of terrestrial origin.

One of the main objectives of collecting UFO sighting data is to try to find out what the phenomena are. There are various ways to do this. One of the most prominent is to analyse the details of each individual sighting carefully and look for evidence that supports or refutes one's working hypothesis. Other approaches include statistical analyses of large numbers of cases looking for patterns of common elements, photographic image analysis, measurements and analysis of the environment in those cases in which the

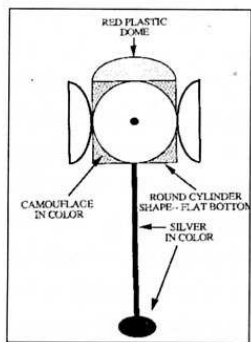
environment is altered because of the presence of the phenomenon, etc. In the case where one suspects an extra-terrestrial origin for the phenomenon in question one typically seeks evidence that the phenomenon or object could not have been manufactured on Earth.

In the present report we have applied principles of "reverse engineering" to reported details involving a very interesting aerial object that was sighted by two adult males in an aircraft and then we discuss some logical consequences of these calculations. Reverse engineering is the process by which characteristics of an object that are not directly visible can be deduced with a reasonable degree of confidence; the process involves (a) verifying all of the basic sighting details for accuracy, (b) establishing as many reasonable assumptions as possible, and (c) integrating those characteristics of an object or phenomenon that are visible with a knowledge of the applicable physical principles. For example, if one knows the number and size of tyres on a truck, the load bearing capacity of the soil it is travelling on, and the depth of the tread marks, one can deduce its weight. Knowing its weight and fuel tank capacity, one may be able to infer what kind of motor it uses. Knowing the viscosity of the soil and the "spread-out" pattern of the tyre tread marks, even the direction of travel and velocity of the truck can be estimated, and so on.

The "reverse engineering" approach is a powerful tool which other investigators should use when possible since it can illuminate otherwise hidden features of a physical object or system. Of course use of this approach relies on the presumption of applicability of well-established engineering and scientific facts; if the phenomenon is not bound by such laws this approach can be very misleading.

The UFO Sighting

On initial contact with one of the authors (RH), Mr. William Lawrence, a 58 year old private pilot with over 1000 hours flight time, reported that he was piloting his *Ercoupe (N3226H)* single engine light airplane with one passenger (Mr.E.L.)¹ on April 19, 1989 at 8.30 am Pacific Time when he had



an encounter with an unidentified flying object.²

Mr. Lawrence recalled the meteorological conditions as: no wind, no clouds, visibility unlimited, and an outside air temperature of 60 deg F. The two men had taken off from Westover Field located at Jackson, California for a local pleasure flight

(and to inspect land which Mr. E.L. had just purchased) and had climbed to an altitude of 3,800 feet, MSL, flying at an indicated airspeed of 96 mph (110 mph, true airspeed). When they were about 7 statute miles east of the airfield and were on a heading of 250 degrees (flying almost due west) their attention was attracted to an airborne object by sunlight glinting off a shiny surface. Immediately after the encounter, the pilot wrote, "My enclosed sketch is exactly what we saw (see sketch). It was moving in a circle around 500 feet below us. I would say the circle in which it was moving was around 10 miles in diameter. It was moving at a high rate of speed. When it passed by us the last time I estimate that we were within 800-1000 ft from it and as we passed over its path there was a slight buffet which was felt in the plane.³ My passenger and I couldn't believe what we were seeing and I felt very uneasy and vulnerable, so we left the area. I now wish I had stayed longer and seen where it went. It seemed to have no means of propulsion. It seemed to be travelling like an object in outer space."⁴

He remarked that he called the Sacramento Federal Aviation Administration office about this sighting soon after leaving the area and "...they laughed."

Upon landing, Mr. Lawrence and his passenger mentioned the encounter to the airport manager and several bystanders. None of them reported hearing or seeing anything unusual at the time of the encounter. At no time during his encounter did he notice any unusual electromagnetic effects on board the airplane.

The authors interviewed Mr. Lawrence by telephone numerous times subsequent to the initial report, and also re-enacted the aerial encounter on August 22, 1991, by using another light aircraft.⁵ The following composite information emerged from these conversations.

The object executed three complete orbits at an apparently constant velocity. The pilot flew in three small radius left turns inside the orbit of the UFO to keep it in sight in approximately the same part of his windshield as it circled him. Although Mr. Lawrence did not time the duration of the sighting directly, he did note the bank angle required to keep the object in constant view (approximately 14 deg.) by reference to the aircraft's turn and bank indicator. A true air speed of 110 mph

in an airplane with a bank angle of 14 deg. will produce a time interval of 124 seconds per orbit.

Mr. Lawrence supplied a sketch (not reproduced) made by the pilot, showing the relative sizes and locations of the flight paths of the airplane and the UFO. Mr. Lawrence is very familiar with the terrain near Westover Field and was able to reconstruct accurately the UFO flight path by re-flying it in his aircraft and noting easily visible ground-reference features, such as prominent hilltops, towns, highways, bodies of water, etc. He is certain that the UFO flight path diameter was no less than 5.8 miles, and may have been as large as 8 miles.

The object definitely maintained the same shape and aspect at all times, only becoming smaller or larger in appearance as it approached and receded from the airplane. Its long axis was not exactly vertical, but was always tipped forward at the top (i.e., in the direction of flight) by about 5 degrees. He estimated that, at the point of closest approach, the object had an angular size smaller than his thumbnail width at arm's length, but larger than his little finger width. This is equivalent to an angle of about 1.5 degrees arc. It became almost a point (in apparent size) at its greatest separation distance from them.

He also recalled that the cylindrical body of the object had dull, multicoloured surface markings resembling "camouflage..." (i.e., brown and at least two shades of dark green). The 4 curved dishes were dull gray in colour and each had a small rounded object nestled in its centre. (Mr. Lawrence is familiar with a "feed horn" which is found at the focus of many parabolic antennae.) He concluded by saying, "I felt after I had thought about it that it may be something our government is experimenting with due to its camouflage colour."

The red dome on the top of the object was not uniform in surface brightness, but appeared to be translucent and partially to reveal subsurface structure. Optically more dense rib-streaks began at the top of the dome and radiated down to the rim (like metal ribs of an umbrella). Mr. Lawrence repeatedly compared the dome's colour to an automobile tail light.

Suspended beneath the centre of the main cylindrical body was a small-diameter, 15-20 foot-long silver rod with an egg-shaped object on the end (see Fig. 1). He estimated that the "egg"⁶ would have been several feet across and that the cylinder was about six (6) feet high and six (6) feet in diameter. The bottom of the cylinder was flat.

When questioned, Mr. Lawrence was adamant that there were no propellers or rotors visible. Similarly, there was no evidence of jet exhaust or any optical distortion at the edges of the object such as heat waves, etc.

Analysis and Discussion

Mr. Lawrence has made no attempt to embroider his story in any manner or to make it appear more like a "typical" UFO sighting - the major points have remained unchanged for more than two years! Neither has he attempted to capitalise on or sensationalise his story. Rather, he continues to regard his experience with a healthy mixture of curiosity and puzzlement. Accordingly, we judge his credibility to be high.

On the basis of his references to the angular size of his thumbnail and little finger, the maximum angular subtense of the object was about 1.5 degrees of arc. Mr. Lawrence reports his distant visual acuity as 20-20; this level of acuity clearly indicates that he could correctly resolve at least one minute of visual angle. Thus, if the UFO was the size estimated by him, he would have been able to maintain visual contact with it at all times during its circular flight path, precisely as he indicated, and also to be capable of seeing the degree of detail he said he saw.

This conclusion was given further credence by the re-enactment of the encounter, in which the investigators flew the smaller inner circle in one aircraft and Mr. Lawrence, in his aircraft, flew the large external orbit originally flown by the UFO. Lighting and viewing angles were similar to those of the original encounter. The fuselage of Mr. Lawrence's aircraft (less than 6 ft thick) was visible and distinct to us at all times. Similarly, if the point of closest approach was as reported, he would have been able to see the details reported, such as colouring patterns, etc.

The possibility remains that Mr. Lawrence saw some type of highly realistic 3-dimensional optical image, rather than a solid object. Arguing against this explanation is the reported experience of turbulence in crossing the wake of the object, the reported initial glinting of sunlight from the object, the very clear atmosphere around it (which would make it very difficult to project such an optical image), and the fact that the object orbited completely around the observers.

After considering all these factors, we believe the most parsimonious explanation is that the two men actually saw a real object and that Mr. Lawrence is reporting what he saw as accurately as he is able. The central questions raised by this sighting, therefore, are the origin and nature of the object. If it is assumed to be of terrestrial origin, then reverse engineering may be applicable.

Except for its dynamic behaviour, many factors point toward a terrestrial, probably military, origin. For example, the object has perfect lateral symmetry as viewed from the side and front, and perfect axial symmetry as viewed from the top and bottom. The "conventional" terrestrial design process often uses symmetry to simplify the analysis

and manufacturing process of complex systems. Similarly, the use of repeated identical assemblies (e.g., the 4 "parabolic" dishes) is a strategy often used in complex designs to capitalise on the efficiency of mass production. The parabolic dishes themselves obviously suggest the transmission and/or reception of radio frequency electromagnetic radiation. The apparent paint scheme can be seen on the flight line of almost any military airbase. All of these factors suggest a terrestrial origin.

Assuming it took the object 124 seconds to make 1 orbit of 5.8 miles diameter, the average velocity of the object was 529 mph. At the reported altitude, this represents a flight Mach number of 0.7. The centrifugal acceleration required to make the object stay on this circular course is 1.22 g. If the orbit diameter was 8 miles, the corresponding values would be 730 mph, 0.97 Mach, and 1.7 g.

Assuming the reported altitude, meteorological conditions, and calculated velocity range, the dynamic (air) pressure due to forward flight of the object would have been between about 4.4 and 8.3 pounds per square inch. The aerodynamic drag of the object would have been dominated by the forward facing dish, which has no streamlining at all as compared to the cylindrical body, the side facing dishes, and the other appendages. Assuming a diameter of 6 feet, and a drag coefficient of 1.0, the forward facing parabolic dish would have experienced a drag force between about 8.9 and 16.9 tons and would have required the expenditure of between 25 and 66 thousand horsepower to maintain forward flight.

There is no aspect of the report that allows a direct calculation of the weight of the object. On the other hand, neglecting appendages, the minimum enclosed volume of the main cylindrical body and the dome is about 226 cubic feet. If this shape were a perfect (helium-filled) balloon, it would have a buoyancy force of only about 14 lb. There is no known conventional powerplant capable of producing 25 thousand horsepower for more than 6 minutes weighing less than 14 lb. Since the aerial encounter lasted well over 6 minutes the object was certainly heavier than air. We can estimate an upper limit on the weight of the object if we make the ad hoc assumption that it was constructed using conventional, aerospace material and assembly practices. This is based on the fact that most aircraft and spacecraft have an equivalent specific gravity approximately that of water (i.e., 1.0). Using a specific gravity of 1.0 and its calculated volume gives an upper boundary for the estimate of the object's weight of about 7.0 tons.

On the other side of the issue, reverse engineering of this aerial object discloses a number of issues that call into question the assumption of terrestrial origin. The most obvious is that the

object was apparently not observing conventional aerodynamic principles in its flight. There are no obvious means of propulsion via momentum exchange with the atmosphere. There are no streamlined fairings to protect the appendages from excessive forces and aerodynamic heating.

Next, consider the four dishes with "feed horns" attached to the main body that, to first appearances, seem to be parabolic reflectors. We speculated that these might, in fact, be antennae for reception or transmission of microwave or some other form of energy for purposes of communication or propulsion (e.g., to somehow counteract the vehicle's drag). On closer examination, it is questionable whether the dishes are parabolic at all. If each dish had even approximately the proportions shown in the pilot's sketch, the reflection focal point would be significantly farther forward of its surface than the position occupied by the "feed horn" (or whatever the object is at the centre of each antenna). If some energy emitter or receiver was associated with the dishes at their focal points it should have been visible on both sides of the object.

Moreover, if this object was an advanced (and previously unknown) man-made military vehicle or device: (1) why was it tested in this locale? There are many tens of thousands of people living in this region of the Sierra foothills. (2) why was it painted a foliage colour when it would fly in the air? Military aircraft are camouflaged very differently than this with homogeneous greys used most frequently. And (3) how would it be launched and landed, considering the long vertical rod suspended beneath it?

And why would it possess a bright red dome on its top? Colour could be totally unrelated to its function, or a direct by-product of its functioning. It may be relevant to this question to recall the 5 degree forward tilt of the object. A simple and obvious conjecture is that the red dome somehow creates a force vector projecting along its axis of symmetry. Tipping the dome (and the rest of the object) forward would thus provide both lift and forward propulsion force. If this is true, however, not only is the nature and origin of the force vector unknown to conventional science and engineering, but it also points to the existence of other unknown physical effects, as well.

Since the object seemed to be in equilibrium at constant altitude and constant forward velocity, the aerodynamic drag force must have been equal to the propulsion force, and the lift must have been equal to the weight. If this force balance was maintained by a single force vector directed along the long axis of the object and tilted forward by 5 deg., then the drag force must have been only about 9% as much as the weight of the object. However, we have already estimated the drag force as being anywhere between 25% and 140% *greater* than the weight of the object. Either the aerodynamic drag

is greatly reduced by some invisible means or the body of the object is literally as heavy as solid lead.

Also, recall that it would have required a centrifugal force between about 1.2 to 1.7 times the pull of gravity to keep the object flying in a circle. Since our hypothesis is that the forward tilt of the object is used to overcome aerodynamic drag, clearly the easiest way to provide the lateral force would also be to tip the object inward (toward the centre of the circular flight path). This would require a tilt angle of more than 45 deg., and would have been easily visible. The fact that this inward tilt angle was *not* reported means that either the hypothesis about the tilt angle being related to a force vector is incorrect, or yet another physical effect is being used to overcome the centrifugal force. The simplest explanation might be a single force field that simultaneously reacts against gravitational mass while at the same time nullifying inertial mass. The authors know of no such capability at this time published in the open literature.

In the final analysis, we cannot reach a conclusion about the ultimate origin of the observed object; we simply present the case in the hope of stimulating the uncovering of similar reports and eliciting further possible explanations.

References

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Haines, R.F. 1982b. Commercial jet crew sights unidentified object - Part II. *Flying Saucer Review*, vol. 27, No. 5, Pp. 208, March.
Haines, R.F., 1991. A breakdown in simultaneous information processing, Chpt. 17 in Obrecht and Stark (Eds.), *Presbyopia Research: From Molecular Biology to Visual Adaptation*, New York, Plenum Press.

Footnotes

- (1) Unfortunately Mr. E.L. died of a heart attack about six weeks after this event took place. There was no relation between the two events.
- (2) The pilot cross checked both his wrist watch and cockpit clock.
- (3) The duration of this buffeting was later estimated to be about three or four sec.
- (4) A commercial pilot flying an *L-1011* on July 4, 1978 used almost exactly the same words to describe his sighting (Haines, 1982a; 1982b).
- (5) During the aerial reconstruction of this event we discovered that the pilot possesses corrected 20:20 distance acuity which would support his statements regarding his ability to see an object of this approximate size over the distances he estimated. In addition, the windshield of his aircraft was carefully inspected and found to have no obvious distortions present at any location in the visual field.
- (6) The word *egg* may be significant since the present "egg's" longitudinal axis is normal to the suspension rod which connects it to the main body of the object. If, for instance, this egg was a high energy source that was radiating upward into the base of the object, possibly into a parabolic collector, its shape should be an oblate spheroid rather than an egg (as viewed from below).
- (7) This statement does not necessarily mean that the object suddenly materialised out of nothing. There are numerous laboratory studies that prove man's perception of actual (physical) events are not always seen accurately or at all (e.g., Haines, 1991.) ■

THE ROESTENBERG STORY (1954)

By Gordon Creighton

PART I.

AN INTERESTING LETTER FROM AUSTRALIA

From John Bainbridge,
48 Church Street,
LEETON, 2705,
New South Wales
Australia.
January 4, 1990.

Dear Mr. Creighton, — I have been reading again, in FSR 34/2 (June Quarter 1989) your Editorial on the need to search for the true “Cosmic Brothers”, followed by your re-run of the early Norwegian CE-III case at Mosjoen in August 1954. Yes — I can just recall that unusual contact case. At the time, I remember I took it all ‘with the traditional pinch of salt’. And I would agree with you that ‘benign contact’ experience does seem to be becoming a rarity!

However, what has really rung the memory bell for me was your reference (in your Comments on that case, on page 7 of FSR 34/2) to the affair at Ranton in England just two months later (October 21, 1954) when a Mrs. Jessie Roestenberg and her two sons were to observe, hovering just above the roof of their house, a disc-shaped “Adamski-type” craft containing two men who seemed to have much the same build and features as the men described both by the Norwegian ladies and by Adamski himself in his own experience of two years earlier (1952).

For I too have an extraordinary personal experience to relate to you — for whatever it may be worth in connection with ‘our enigmatic subject’ — and it is intimately connected with that very same case at Ranton!

Some years after that Norwegian report of August 1954 (the date would have been between February 1957 and September 1964. ED. FSR), when I was still living in England, I had been on a business trip down to London, and I was returning one evening, my business completed, by train to my home at Kendal in the Lake District.

We had only gone a short distance in the train — I cannot recall how far — when it seems that, owing to some hold-up or blockage on the line, we pulled in at a station and were told to vacate that particular train, and board another one at another platform quite some distance away.

The new train was a completely empty one, obviously brought into service to meet the contingency of the moment.

I entered an empty compartment of the train, and took one of the inside seats next to the corridor. Another man entered, and took the other end-seat on the same side as myself, and adjacent to the other window. Then, a little while later, a third man looked in from the corridor and, seemingly deciding that he liked the looks of the pair of us as fellow-travellers, he sat down opposite the second man, in the other corner. There were only the three of us in that compartment for the remainder of this narrative.

The three of us continued sitting in silence for a while, listening to the blare of the Tannoy system giving continued instructions to passengers about the train. A little while later, we three began a desultory conversation, about the weather, etc. With the ice thus broken so to speak, the third passenger — who subsequently turned out to be Arthur Roestenberg — looked over towards me, on the far end of the opposite bench, and addressed the following question directly to me alone:-

“Do you believe in Flying Saucers?”

Note well, dear Gordon Creighton, that the conversation up to that point had been an evenly balanced three-way chat on ordinary mundane matters of the moment.

And now this question was being directed straight at me!

And indeed, it so happened that I was already deeply engaged in the study of the UFO enigma! Somehow or other Roestenberg must have sensed this. Anyway, I at once launched into a conversation of some length with him, giving such information and such conclusions as I had, with, I think, the odd comment thrown in now and again by him.

Then, all of a sudden, he held up a large hand, as if requesting silence from me, and inclining his head and eyes upwards, as if straining to listen to something else, he stated:-

“He is to yourself as your own brother!”

In other words, it seems that he was repeating to me words which he was hearing clairaudiently from some unseen person who was also listening in on our conversation!

After a momentary pause, I then continued with my own narrative on the subject of flying saucers, without making any comment on Roestenberg’s interjection.

I might well have been very tempted to enquire re. the nature of that strange interruption in our conversation, had it not been for the behaviour of the third man present in the compartment. From the wild-eyed look on his face, as he heard my narrative — and then the interjection — it seemed as though he was about to ‘take a header’ straight out through the carriage window.