STARSHIP EXPLORER. AIR LAW 1968.

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SCOTLAND – UNITED KINDOM.

LOCATION : Mortimer – Berkshire – United Kingdom.
DIVISION : Manned Flight.
SEMINAR : United Kingdom Air Law.
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STATUS : Head of R&D Human Studies.

Star Ship Explorer is a new concept in flight technology.
Whose design is targeted at the commercial space business domain.
This document of 1968 has been revised to meet our present day operation.

1 **STARSHIP EXPLORER**. Alternatively, any other proposed **INVERSE-G-VEHICLE** is without doubt design, with the purpose of flight in mind.

2 As such, it must conform to a set of rules by which it will not be the cause of an accident to itself, or to any other flying machine.

3 Therefore, as airlines are already there first, then I have no other option but to understand their laws and apply them to my craft, in such a manner that will protect it and other people's products from damage.

4 However, their laws are constant being amended, to suit their needs, and to keep up to date with them is almost impossible.

5 Somewhere, Somehow, I need to set conditions which will give me the safety margin that I need.

6 The procedures for Air Navigation Services - Rules of the Air and Traffic Services (PANS-RAC) as now presented result from procedures formulated at the outset by
7 the Air Traffic Committee of the North Atlantic Route Service Conference (Dublin, March 1946).

8 A second version was published as Procedures for Air Navigation Services - Air Traffic Control (PANS-ATC) (August 1946) following review of the original procedures by the International Conference on European-Mediterranean Route Service Organisation (Paris, April-May 1946).

9 A Third Edition (1947) followed the second session of the Rules of the Air and Air Traffic Control Practices (RAC) Division (Montreal, December 1946 - January 1947).

10 The Fourth Edition (1951) was developed in pursuance of recommendations of the Fourth Session of the Rules of the Air and Traffic Control (RAC) Division (November - December 1950).

11 In this edition the title of the procedures was changed to Procedures for Air Navigation Services - Rules of the Air Traffic Services (PANS-RAC) to reflect the fact that certain procedures:

(1) Applicable to pilots and

(2) A number of procedures relating to the provision of flight information and:

(3) Alerting services were included therein, in addition to the procedures specific to the operation of the Air Traffic Control Service.

12 New editions of the Procedures for Air Navigation Services - Rules of the Air and Air Traffic services (PANS-RAC) were issued subsequently as follows:

1 **Fifth Edition (1954) following the first Air Navigation Conference (February - March 1953).**

2 Sixth Edition (1956) following the Second Air Navigation Conference (August September 1955).

3 Seventh Edition (1960) following the Rules of the Air, Air Traffic Services and Search and Rescue (RAC/SAR) Divisions (October - November 1958.

4 Eight Edition (1966) following the Rules of the Air and Air Traffic Services / Operations (RAC/OPS) Divisional Meeting (May - June 1963).

5 Ninth Edition (1967) following the Fifth Meeting of the Air Traffic Control Automation Panel (ATCAP) (February - March 1966).

13 Now from all this information, and a mass of dates and amendments, which I could had quoted here, which is more or less like that above, tells you basically absolutely nothing.

14 That is the correct way, which experts do their business, and without doubt, is the reason why you have to keep on re-writing the rules, or maybe they have nothing better to do.

15 Now from all this information, and a mass of dates and amendments which I could had quoted here, which is more or less like that above, tells you basically absolutely nothing

16 That is the correct way, which experts do their business, and without doubt, is the reason why you have to keep on re-writing the rules, or maybe they have nothing better to do.

17 STATUS AND SCOPE OF THE DOCUMENT:

18 The Procedures for Air Navigation Services - Rules of the Air and Traffic Services (**PANS-RAC**) are complementary to the Standards and Recommended Practices contained in Annex 2 - Rules of the Air and in Annex 11 - Air Traffic Services.

19 They are supplemented when necessary by regional procedures contained in the Regional Supplementary Procedures (**Doc 7030**).

20 The Procedures for Air Navigation Services (**PANS**) do not have the same status as the Standards and Recommended Practices.

21 Whilst the latter are adopted by Council in pursuance of Article 37 of the Convention on International Civil Aviation, subject to the full procedure of Article 90, the **PANS** are approved by the Council and Recommended to Contracting States for World-wide application.

22 Whilst the **PANS** may contain material, which may eventually become Standards or Recommended Practices (**SARPS**) when it has reached the maturity and stability necessary for adoption as such.

23 They may also comprise material prepared as an amplification of the basic principles in the corresponding **SARPS**, and designed particularly to assist the user in the application of those **SARPS**.

24 This latter material will not necessarily reach a stage at which it would be suitable for inclusion in an Annex.

25 It is, to a large extent, fluid and liable to relatively frequent change; it is therefore an advantage for it to be included in **PANS** since any amendment can be approved by a simple act of Council.

26 Whilst an amendment to **SARPS** is subject to the full procedure of Article 90, which involves a certain lapse of time before the amendment can become effective.

27 TECHNICAL COMMENTARY

THE PURPOSE OF THE PROCEDURES

28 The purpose of the procedures for Air Navigation Services - Rules of the Air and Air Traffic Services (**PANS-RAC**) is to specify in detail than was possible in the **SARPS** the actual procedures to be applied by Air Traffic Services units in providing the various air traffic services to air traffic.

29 MOST SIGNIFICANT CHANGES INCORPORATED IN THE TENTH EDITION

30 The Tenth Edition incorporates major changes affecting all parts of the document, except Part VII, and Appendix 1.

31 The most significant changes are the introduction of revised provisions on position reporting and reporting of operational and meteorological information.

28 The types of flights to be provided with separation, the further limitation of the use of VMC clearances to specified portions of climb and descent during hours of daylight.

29 The introduction - on the basis of Regional Air Navigation Agreement - of the Mach number technique for maintaining longitudinal separation between aircraft and the Introduction of procedures governing the use of **SSR** in the air traffic services.

32 Changes have also been effected to the provisions governing the application of separation minima and their reduction in specified circumstances, clearances, addressing of ATS messages, flight information service and alerting service.

30 Additionally, guidance material has been introduced regarding the application of the Mach number technique to separation of subsonic aircraft.

31 Use of secondary surveillance radar in the air traffic services and on a standard form and attendant procedures for the reporting of air traffic incidents.

32 Amendment 1 to the Tenth Edition incorporates major changes to the provisions in Appendix 1 concerning formats and data conventions for air-report messages.

33 Changes have also been made to the provisions in Part III, Appendices 2 and 3, and Attachment B with a view to clarifying the meaning and the use of the terms:

1 'Estimated time of arrival'

2 'Estimated time of departure'

In flight plans, ATS messages and communication failure procedures.

34 Amendment 2 to the Tenth Edition aligns the **PANS-RAC** provisions with those of Annex 2, as amended by Amendment 14 relating to clarification of the question of authority over aircraft operating over the high seas.

35 The Amendment affects all but two Parts of the **PANS-RAC** and also the majority of Appendices and Attachments.

36 Amendment 3 to the Tenth Edition introduces guidance material relating to the use of repetitive flight plans and minor changes to the provisions in Part II and Part VIII to reflect the existence of arrangements for the use of such flight plans.

37 Definitions for snow on the ground and minor changes to the texts in Part V and Appendix 3 are also introduced.

38 Amendment 4 to the Tenth Edition introduces a number of changes to cater for area navigation practices, permits omission of level information from position reports in prescribed circumstances,

39 Introduces some new SSR radiotelephony phraseologies, and updates the guidance material on the use of secondary surveillance radar in the air traffic services.

Star Ship Explorer project has to understand this situation of conventional flight, to survive.

40 Amendment 5 to the Tenth Edition introduces a number of provisions in Parts III and V relating to practices to be followed by air traffic services units in the event that an aircraft is being subjected to unlawful interference or that such interference is suspected.

41 Amendment 6 to the Tenth Edition introduces procedures relating to provision of Automatic Terminal Information Services.

42 Aligns the **PANS-RAC** provisions with those of Annex 2, as amended by Amendment 18 relating to communication failure.

43 Provides for altimeter settings in air-ground communications to be rounded downwards to the nearest whole millibar, and introduces changes in the procedures concerning radar identification.

44 The Amendment also includes a number of minor modifications to the existing text in the interest of clarity and consistency.

45 Amendment 7 to the Tenth Edition introduces procedures to be followed as soon as an air traffic services becomes aware of a strayed or unidentified aircraft and procedures designed to assist an aircraft being intercepted.

46 It also introduces procedures relating to cruise climb, clearances for supersonic aircraft, en-route absorption of notified terminal delay.

47 The crediting of absorbed delay when establishing the approach sequence, and the Notification of expected take-off time under certain circumstances

48 Amendment 8 to the Tenth Edition introduces changes to specify the use of **SSR** Code 7500 in lieu of **SSR** Code 3100 in the event of unlawful interference.

49 It also introduces changes to the definitions and procedures concerning the provision of information to aircraft and air reporting by aircraft.

50 To align them with amended definitions and provisions introduced into Annex 3 by Amendment 60. A change is also made to the Model Flight Plan Form concerning frequencies for survival radio equipment.

51 APPLICATION

52 The implementation of procedures is the responsibility of Contracting States; they are applied in actual operations only after, and in so far as, States have enforced them.

53 However, with a view to facilitating their processing towards implementation by States, they have been prepared in language, which will permit direct use by air traffic services personnel, and others associated with the provisions of air traffic services to international air navigation.

54 This Tenth Edition is applicable from 4 February 1971, the date established by Council.

55 PUBLICATION OF DIFFERENCES

I have added updates that I have received since this original document was written.

The **PANS** do not carry the status afforded to Standards adopted by the Council as Annexes to the Convention.

56 Therefore, do not come within the obligation imposed by Article 38 of the Convention to notify differences in the event of non-implementation.

57 However, attention of States is drawn to the provision of Annex 15 related to the publication in their Aeronautical Information Publications of lists of significant differences between their procedures and the related **ICAO** Procedures.

58 PROMULGATION OF INFORMATION

Information relating to the establishment and withdrawal of and changes to facilities, services and procedures affecting aircraft operations provided according to the Procedures specified in this document should be notified and take effect in accordance with Annex 15.

59 As you can witness that at the time in which I commenced my study work upon the **INVERSE-G-VEHICLE** for manned flight, air laws were in a right mix up, with changes being made all over the place, an extremely tiring period.

I WILL INSERT AMENDMENTS MOW OF WHAT I UNDERSTAND SINCE THIS DOCUMENT WAS ORIGINALLY ISSUED.

60 This discussion is based upon Document **4444-RAC/501/10** Amendment No.8. 12/8/76.

61 Amendment No.8 to the **PROCEDURES FOR AIR NAVIGATION SERVICES RULES OF THE AIR AND AIR TRAFFIC SERVICES.** TENTH EDITION **- 1970. INTERNATIONAL CIVIL AVIATION ORGANIZATION.**

62 CHECK-LIST OF AMENDMENTS TO THE PANS-RAC TENTH EDITION (DOC 4444-RAC/501/10; which will appear on the next page.

The investigation into the structural design evaluation of Star ship Ezekiel MK V project work undertaken in the 1960s period lead the way to design such a spacecraft suitable for deep space penetration.

At the same time, I needed to fit it into a commercial operation system.

Problem conventional aircraft are already operating and have set rules to obey.

Our work has to fit in with their functions to ride smoothly to success.

STARSHIP EXPLORER. AIR LAW 1968.

TENTH EDITION incorporates all amendments approved by the council prior 01.June 1970	DATE OF APPLICABILITY 04, February 1972
Amendment No.1 to the Tenth Edition approved by the Council on 24, March 1972	07, December 1972
Amendment No.2. To the Tenth Edition approved by the Council on 15, November 1972	16, August 1973
Amendment No.3. To the Tenth Edition approved by the Council on 13, December 1972	16, August 1973
Amendment No.4 to the Tenth Edition approved by the Council on 23, March 1973	23, May 1974
Amendment No. 5 to the Tenth Edition approved by the Council on 07, December 1973	23, May 1974
Amendment No.6 to the Tenth Edition approved by the Council on 08, April 1974	27, February 1975
Amendment No. 7 to the Tenth Edition approved by the Council on 04, February 1975	09, October 1975
Amendment No.8 to the Tenth Edition approved by the Council on 12, December 1975 Replacement pages (ix) to (xii) 1-2, 1-7 to 1-9, 1-12 to 1-14 2-9 to 2-11, 3-16, 3-17, 4-8, 5-7, 8-17 to 8-20, A-3, A-4, A-8, A-20, 16, 28, 83 and 86.	12, August 1976

I have given you here an insight on conventional flying operational requirements, which no doubt are many more documents been release since the last dates stated here. That is just conventional flying domain.

To that lot of rules we add the Inverse-Gravity-Vehicle (**I-G-V)** requirements, if our intentions relate to a commercial operational business – which at this stage is the plan.

63 Now you can witness the dates, which a certain law should had been put into operation, even though discussions upon that problem started some time before it was put into real practice.

64 All these pages, which I am presenting here, are actually the pages, which we were ordered to replace those pages in our **PANS-RAC** (Tenth Edition), to incorporate amendment 8 applicable on 12 August 1976.

65 The present edition - the Tenth - has been issued following action on the recommendations of the Sixth Air Navigation Conference (April - May 1969), which resulted in changes approved by the Council on 1 June 1970 as Amendment 2 to the Ninth Edition of the **PANS-RAC**.

66 Amendment 1 to the Tenth Edition, which was approved by the Council on 24 March 1972.

67 Resulted from action taken in pursuance of Recommendation 5.1/2 of the Sixth Air Navigation Conference and Recommendation 2.4/5, parts (i) and (ii) of the Limited EUM (**RAC-COM**) Regional Air Navigation Meeting.

68 Amendment 2 to the Tenth Edition was consequential upon adoption of Amendment 14 to Annex 2 relating to clarification of the question of authority over aircraft operating over the high seas. The Council approved it on 15 November 1972.

69 Amendment 3 to the Tenth Edition resulted from a study undertaken by the Air Navigation Commission in pursuance of Recommendation 1/1 of the Fifth Meeting of the Air Traffic Control Automation Panel.

70 From a proposal by a State, and from the adoption of Amendment 28 to Annex 14. It was approved by the Council on 13 December 1972.

71 Amendment 4 to the Tenth Edition was approved by the Council on 23 March 1973 and resulted from Recommendations of the Seventh Air Navigation Conference (Montreal, 5-28 April 1972).

72 Amendment 5 to the Tenth Edition resulted from Council action in pursuance of Assembly Resolutions A17-10 and A18-10. It was approved by the Council on 7 December 1973.

73 Amendment 6 to the Tenth Edition was approved by the Council on 8 April 1974.

74 Part of the Amendment was consequential upon adoption of Amendment 18 to Annex 2 relating to communication failure procedures and other parts of the Amendment resulted from Recommendation of the Air Navigation Commission in pursuance of various items on its work programme.

75 Amendment 7 to the Tenth Edition was approved by the Council on 4 February 1975. Part of the Amendment resulted from a study concerning the interception of civil aircraft and other parts arose as a consequence of recommendations of the Fourth Meeting of the Technical Panel on Supersonic Transport Operations. In addition, the Inverse-Gravity-Vehicle (**I-G-V**) falls into the category of Supersonic Transport Operations.

77 Amendment 8 to the Tenth Edition was approved by the Council on 12 December 1975.

77 The amendment resulted, in part, from a study concerning **SSR** Code 7500 for use in the event of unlawful interference and in part from amendments consequential upon adoption of Amendment 60 to Annex 3 and Amendment 48 to Annex 10.

78 Now you to know what a problem I have to design, construct, and operate the **INVERSE-G-VEHICLE**.

79 In addition, boy, what a hell of a mess there will be in amendments when I state that the **MANNED FLIGHT OPERATIONS** of the **INVERSE-G-VEHICLE** are going airborne.

80 In addition, that day is sure coming fast.

81 None of these officials wants to be bothered with any new project that fails to meet their requirement.

82 They just pass you on to another person, that do not know why you are talking to them, it is nothing to do with them, and that is how it has been going today.

83 Therefore, if they do not want to know, then it is their problem in the hour of surprise when they hear the news that radio signals are being picked up from a strange unidentified object some 50 miles above the earth surface.

84 It will be just like that, day when the West heard those signals from **SPUTNIK 1** launched in 1957, by the Russians.

85 However, far worst, because this craft can land anywhere, and do not have to recognise any countries legal laws, as such.

86 I have signed no agreement to follow any manmade law in reference to flight of the **INVERSE-G-VEHICLE**, or its operation.

87 What I pledge to honour, is purely a voluntary act on my part in good faith with the powers to be, even if I can overrule them, and there is nothing they could do about it, if I did.

88 However, I have no intentions, unless they make a condition as such, that there is no other choice, but to overrule them.

89 I trust that such a state will not occur.

90 While Brain from Australia was here, from the 16-07-1993 for 5 days, I did quite a number of phone calls to the International Civil Aviation Organisation, with the aim to re-start the communication chain for the construction of the first **INVERSE-G-VEHICLE** to be official constructed in accordance with the powers to be, result is that it did not conform to an aircraft, as such.

92 They were not interested; they did state that only major aircraft companies registered could build any new class of aircraft that it did not conform to an aircraft, as such.

93 They were not interested; they did state that only major aircraft companies registered could build any new class of aircraft.

94 Thus, I hereby defined for all time, the follow definition:

(1) That an aircraft requires air by which to fly

(2) That the INVERSE-G-VEHICLE does not rely on air by which to fly

95 Therefore under the definition of an aircraft, the **INVERSE-G-VEHICLE** does not conform.

96 As such, it is outside of all present-day legal laws, as such.

97 Therefore, as such, there cannot be any legal demand that the **INVERSE-G-VEHICLE** must be manufactured or developed by a registered aircraft manufacturer.

98 Therefore, **I JOHN ROY ROBERT SEARL** is prepared to form and head a team to develop the **INVERSE-G-VEHICLE**, and to define its operational procedures, in such a manner, that will not conflict with standard practices by the airline operators.

99 In the desired wish to undertake this work without causing any accident directly or indirectly, by any action due to the craft or myself, including that of any member of my team.

100 My main objective is in pursuance of creating a commercial business for the smaller companies upon this earth, of transporting their staff or products to the market place.

101 And in pursuance of developing a commercial space research venture for the smaller companies.

102 Thereby offering the smaller companies a chance to equal the larger companies involved in space.

103 So in pursuance of this objective, the understanding of normal airlines requirements, so that we can honour them on a voluntary basis.

104 And to discuss what they mean, and how best we can conform to meet those requirements, and why

105 PROCEDURES FOR AIR NAVIGATION SERVICES.

PART 1. DEFINITIONS

106 NOTE. –

Throughout the text of this document, the term **SERVICE** is used as an abstract known to designate functions, or **SERVICE RENDERED**; the term **UNIT** is used to designate a collective body performing a service.

107 When the following terms are used in the present document they have the following meanings:

Accepting unit / controller.

108 Air traffic control unit / air traffic controller next to take control of an aircraft.

109 If you are piloting an **INVERSE-G-VEHICLE**, then what I am writing here is vital important to you to understand.

110 If you intend to land on an airfield, or near one.

111 NOTE;

See definition of **TRANSFERRING UNIT / CONTROLLER**.

112 Advisory airspace.

113 A generic term meaning variously, advisory area(s) or advisory route(s).

114 Advisory area.

115 A designated area within a flight information region where air traffic advisory service is available.

116 Advisory route.

117A route within a flight information region along which air traffic advisory service is available.

117 NOTE.

Air traffic control service provides a much more complete service than air traffic advisory service; advisory areas and routes are therefore not established within controlled airspace, but air traffic advisory service may be provided below and above control areas.

118 This is vital important to understand, by those who wish to pilot **INVERSE-G-VEHICLES.**

119 Aerodrome

A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and Movement of aircraft.

120 **Aerodrome control service**

Air traffic control service for aerodrome traffic.

121 **Aerodrome control tower**

A unit established to provide air traffic control service to aerodrome traffic.

122 For those who cannot understand this statement, to me it means, the movement of aircraft upon that airport / airfield, taxiing on landing / taking off, or going to the pumps for fuel, where tankers are not available.

123 At some airports you have to taxi to the tanker, at others the tanker comes to you.

124 Whichever the case, someone must direct that movement, so as to prevent any accident-taking place, by pilot's error of judgement.

125 Aerodrome elevation

The elevation of the highest point of the landing area.

126 Aerodrome taxi circuit

The specified path of aircraft on the manoeuvring area during specific wind conditions.

127 Aerodrome traffic

All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.

128 NOTE.

An aircraft is in the vicinity of an aerodrome when it is in, entering or leaving an aerodrome traffic circuit.

129 Aerodrome traffic circuit

The specified path to be flown by aircraft operating in the vicinity of an aerodrome.

130 Aeronautical fixed service (AFS)

A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.

131 Aeronautical fixed station

A station in the aeronautical fixed service.

132 Aeronautical ground light

Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.

133 Aeronautical Information Publication

A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential

134 Aeronautical mobile service

A radio communication service between aircraft stations and aeronautical stations, or between aircraft stations.

135 Aeronautical station.

A land station in the aeronautical mobile service carrying on a service with aircraft stations.

In certain instances, an aeronautical station may be placed on board a ship or an earth satellite.

136 **Aeronautical telecommunication service**

A telecommunication service provided for any aeronautical purpose.

137 **Aeronautical telecommunication station**

A station in the aeronautical telecommunication service.

138 **Aircraft**

Any machines that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

139 Thank you, there is our answer, the **INVERSE-G-VEHICLE** does not come within the term of an aircraft.

140 Aircraft identification

A group of letters, figures or a combination thereof which is either identical to, or the coded equivalent of, the aircraft call sign to be used in air-ground communications, and which is used to identify the aircraft in ground - ground air traffic services communications.

141 In the case of the first **INVERSE-G-VEHICLE**, it will most likely use the call sign of:

Explorer = (Explorer, calling Blackbushe Control tower, we are ready for lift-off).

Blackbushe Tower to Explorer = you are clear to roll)

142 **Aircraft observation**

The evaluation of one or more meteorological elements made from an aircraft in flight.

143 **Air-ground communication**

Two-way communication between aircraft and stations or locations on the surface of the earth.

144 **Air-ground control radio station**

An aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area.

145 **Air-ground control radio station**

An aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area.

146 **Air-report**

A report from an aircraft in flight prepared in conformity with requirements for position and operational and/or meteorological reporting.

147 **Air-to-ground communications**

One-way communication from aircraft to stations or locations on the surface of the earth.

148 **Air-traffic**

All aircraft in flight or operating on the manoeuvring area of an aerodrome.

149 These terms must be understood by all that fly the **INVERSE-GRAVITY-VEHICLE**.

150 Final approach

That part of an instrument approaches procedure from the time the aircraft has:

(a) Completed the last procedure turn or base turn, where one is specified

(b) Crossed a specified fix; or

(c) Intercepted the last track specified for the procedure ;

Until it has crossed a point in the vicinity of an aerodrome from which:

(i) A landing can be made: or

(ii) A missed approach procedure is initiated.

151 **Flight crewmember**

A licensed crewmember charged with duties essential to the operation of an aircraft or **I-G-V** during flight time.

152 **Flight information centre**

A unit established to provide flight information service and alerting service.

153 **Flight information region**

Airspace of defined dimensions within which flight information service and alerting service are provided.

154 **Flight information service**

A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

155 **Flight levels**

Surfaces of constant atmospheric pressure, which are related to a specific pressure datum, 1013.2 Mb (29.92 inches), and are separated by specific pressure intervals

156 NOTE 1.

A pressure type altimeter calibrated in accordance with the standard Atmosphere:

(a) When set to a QNH altimeter setting, will indicate altitude

(b) When set to QFE altimeter setting, will indicate height above the QFE reference datum

(c) When set to a pressure of 1013.2 Mb (29.92inches) may be used to indicate flight levels.

157 NOTE 2.

The term's height and altitude, used in Note 1 above, indicate altimetric rather than geometric heights and altitudes.

158 Flight plan

Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

158 NOTE.

Specifications for flight plans are contained in Annex 2.

A Model Flight Plan Form is contained in Appendix 2 to this document.

159 Flight status

An indication of whether a given aircraft requires special handling by traffic services units or not.

160 Flight visibility

The visibility forward from the cockpit of an aircraft in flight.

161 Flow control

Measures designed to adjust the flow of traffic into a given airspace, along a given route, or bound for a given aerodrome, so as to ensure the most effective utilisation of the airspace.

162 Forecast

A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.

163 Glide path

A descent profile determined for vertical guidance during a final approach.

164 **Ground-to-air communication**

One-way communication from stations or locations on the surface of the earth to aircraft or Inverse-Gravity-Vehicles.

165 **Ground visibility**

The visibility at an aerodrome, as reported by an accredited observer.

166 **Heading**

The direction, in which the longitudinal axis of the aircraft or Inverse-Gravity-Vehicle is pointed, usually expressed in degrees from north (true, magnetic, compass or grid).

167 **Height:**

(1) The vertical distance of a levels point or an object considered as a point measured from a specified datum.

168 **NOTE**. –

The datum may be specified either in the text or in an explanatory note in the publication concerned.

(2) The vertical dimension of an object.

169 **NOTE.** –

The term height may also be used in a figurative sense for a dimension other than vertical, e.g., the height of a letter or a figure painted on a runway.

170 **Holding point**

A specified location identified by visual or other means, in the vicinity of which the position of an aircraft or Inverse-Gravity-Vehicles in flight is maintained in accordance with air traffic control clearances.

171 **Holding procedure**

A predetermined manoeuvre, which keeps an aircraft or an Inverse-Gravity-Vehicle within a specified airspace whilst awaiting further clearance.

IFR The symbol used to designate the instrument flight rules

IFR FLIGHT A flight conducted in accordance with the instrument flight rules

IMC The symbol used to designate instrument meteorological conditions.

INCERFA The code word used to designate an uncertainty phase

172 **Initial approach**

That part of an instrument approach procedure consisting of the first approach to the first navigational facility associated with the procedure, or to a predetermined fix.

173 **Instrument approach procedure**

A series of predetermined manoeuvres for the orderly transfer of an aircraft OR Inverse-Gravity-Vehicle under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.

174 **NOTE. –**

The term instrument flight conditions is used in this definition in preference to other terms such as instrument meteorological conditions, because the latter term refers to meteorological conditions necessitating flight under instrument flight rules, but does not necessarily imply flight by reference to instruments, which is the intent of the present wording.

175 **Instrument meteorological conditions**

Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

176 **NOTE 1.-**

The specified minima for visual meteorological conditions are contained in Chapter 4 of Annex 2.

177 **NOTE 2. –**

In a control zone, a VFR flight may proceed under instrument meteorological conditions if and as authorised by air traffic control.

178 **Landing area**

The part of the movement area intended for the landing or take-off run of aircraft.

179 Level

A generic term relating to the vertical position of an aircraft or Inverse-Gravity-Vehicle in flight and meaning variously, height, altitude or flight levels.

180 **Location indicator**

A four-letter code group formulated in accordance with rules prescribed by **ICAO** and assigned to the location of an aeronautical fixed station.

181 **Manoeuvring area**

That part of an aerodrome to be used for the take-off and landing of aircraft or **I-G-V** and for the movement of aircraft associated with take-off and landing, excluding aprons.

182 **Meteorological information**

Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.

183 **Meteorological office**

An office designated to provide meteorological service for international air navigation.

184 **Meteorological report**

A statement of observed meteorological conditions related to a specified time and location.

185 **Missed approach procedure**

The procedure to be followed if, after an instrument approach, a landing is not affected and occurring normally:

(a) When the aircraft or Inverse-Gravity-Vehicle has descended to the decision height and has not established visual contact ; or

(b) When directed by air traffic control to pull up or to go around again.

186 **Mode (SSR Mode)**

The letter or number assigned to a specific pulse spacing of the interrogation signals transmitted by an interrogator.

186 There four modes, A, B, C and D specified in Annex 10, corresponding to four different interrogation pulse spacing's.

187 **Movement area**

188 That part of an aerodrome intended for the surface movement of aircraft, including the manoeuvring area and aprons for Inverse-Gravity-Vehicles.

189 **Non-radar separation**

190 The separation used when aircraft or Inverse-Gravity-Vehicle position information derived from sources other than radar.

191 **NOTAM**

192 A notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

193 190 **CLASS 1 DISTRIBUTION**. Distribution by means of telecommunication

194 191 **CLASS 11 DISTRIBUTIONS**. Distribution by means other than telecommunications.

196 Obstacle clearance limit (OCL)

The height above aerodrome elevation below which the minimum prescribed vertical clearance cannot be maintained either on approach or in the event of a missed approach.

197 Operator

A person, organisation or enterprise engaged in or offering to engage in an aircraft or Inverse-Gravity-Vehicle operation.

198 This term will also apply to us, even though the **INVERSE-G-VEHICLE**, at this time fails to meet the definition of the phase term aircraft.

199 Parity

A condition where the sum of all the bits in an array of bits satisfies a nominated numerical criterion.

200 NOTE. –

If the numerical criterion is such that the sum must be an even number, an array of bits, which satisfies it, is then said to have even parity.

If the criterion is such that the sum must be an odd number, an array of bits, which satisfies it, is then said to have odd parity.

201 **Parity error**

A situation where a parity criterion is not satisfied.

202 Pilot-in-command

The pilot responsible for the operation and safety of the aircraft or Inverse-Gravity-Vehicle during flight time.

203 **Precision approach radar (PAR)**

Primary radar equipment used to determine the position of an aircraft or Inverse-Gravity-Vehicle during final approach, in terms of lateral and vertical deviations relative to a nominal approach path, and in range relative to touchdown.

204 NOTE. –

Precision approach radars are designated to enable pilots of aircraft to be given guidance by radio communications during the final stages of the approach to land.

205 **Primary radar**

A radar system, which uses reflected radio signals.

206 Slowly you are getting to know the terms used in relation to normal flying, which we must know, as I shall be using such phases in future articles within these documents.

207 Procedure turn

A manoeuvre in which a turn is made away from a designated track following by a turn in the opposite direction, both turns being executed so as to permit the aircraft to intercept and proceed along the reciprocal of the designated track.

NOTE 1

Procedure turns are designated left or right according to the direction of the initial turn as follows:

(a) Procedure turns left.

A procedure turn in which the initial turn is to the left

(b) Procedure turns right.

A procedure turn in which the initial turn is to the right

208 NOTE 2. –

Procedure turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual instrument approach Procedure, the only restriction being that the obstacle clearance specified in **PANS-OPS** (Doc 8168-OPS/611) not be infringed.

209 Profile

The orthogonal projection of a flight path or portion thereof on the vertical surface contains the normal track.

210 Radar

A radar detection device, which provides information on range, azimuth and/or elevation of objects.

211 Radar approach

An approach executed by an aircraft, under the direction of a radar controller.

212 Radar blip

A generic term meaning variously a radar echo or a radar response from an aircraft.

213 Radar clutter

The visual indication on a radar display of unwanted signals.

214 Radar contact

The situation, which exists when the radar blip of a particular aircraft is seen and identified on a radar display.

215 Radar control

Term used to indicate that radar-derived information is employed directly in the provision of air traffic control service.

216 Radar controller

A qualified air traffic controller holding a radar rating appropriate to the functions to which he is assigned.

217 Radar display

An electronic display of radar-derived information depicting the position and movement of aircraft or Inverse-Gravity-Vehicle.

218 Radar echo

The visual indication on a radar display of a radar signal reflected from an object.

219 Radar identification The process of correlating particular radar blip with a specific aircraft.

220 Well, you are slowly coming to grips with the terms that we must understand, and be able to apply such phases within our reports.

221 Just because the **INVERSE-G-VEHICLE** is not an aircraft, does not mean that it cannot function in the same manner.

222 Radar map

Information superimposed on a radar display to provide ready indication of selected features.

223 Radar monitoring

The use of radar for the purpose of providing aircraft or Inverse-Gravity-Vehicles with information and advice relative to significant deviations from nominal flight path.

224 Radar response (or SSR response)

The visual indication, on a radar display, of a radar signal transmitted from an object in reply to an interrogation.

225 Radar separation

The separation used when aircraft or Inverse-Gravity-Vehicle position information is derived from radar sources.

226 Radar service

Term used to indicate a service provided directly by means of radar.

227 Radar track position

An extrapolation of aircraft or Inverse-Gravity-Vehicle position by the computer based upon radar information and used by the computer for tracking purposes.

228 NOTE. –

In some cases, information other than radar-derived information is used to assist the tracking processes.

229 Radar unit

That element of an air traffic services unit, which uses radar equipment to provide one or more services.

230 Radar vectoring

Provision of navigational guidance to aircraft or Inverse-Gravity-Vehicle in the form of

Specific headings, based on the use of radar.

231 Receiving unit / controller

Air traffic services unit/air traffic controller to which a message is sent.

232 NOTE. – See definition of sending unit / controller.

233 Reporting line

A specified geographical line in relation to which the position of an aircraft can be reported.

234 Reporting point

A specified geographical location in relation to which the position of an aircraft can be reported.

235 Rescue co-ordination centre

A centre established within an assigned search and rescue area to promote efficient organisation of search and rescue.

236 Rescue unit

A unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue.

237 Runway

A defined rectangular area, on a land aerodrome, prepared for the landing and take-off run of aircraft along its length.

238 Runway visual range

The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

239 Secondary radar

A radar system wherein a radio signal transmitted from the radar station initiates the transmission of a radio signal from another station.

240 Secondary surveillance radar (SSR)

A system of secondary radar using ground transmitters / receivers (**interrogators**) and airborne transponders conforming to specifications developed by **ICAO**.

241 Sending unit / controller

Air traffic services unit / air traffic controller transmitting a message.

242 NOTE. – See definition of receiving unit / controller.

243 **Shoreline**

A line following the general contour of the shore, except that in cases of inlets or bays less than 30 nautical miles in width, the line shall pass directly across the inlet or bay to intersect the general contour on the opposite side.

244 **SIGMET information**

Information issued by a meteorological watch officer concerning the occurrence or expected occurrence of specified en-route weather phenomena, which may affect the safety of aircraft operations.

245 **Signal area**

An area on an aerodrome used for the display of ground signals.

246 **Snow (on the ground)**

(a) Dry snow.

Snow which can be blown if loose or,

If compacted by hand, will fall apart upon release;

Specific gravity:

Up to but not including 0.35.

(b) Wet snow.

Snow which, if compacted by hand, will stick together and tend to or form a snowball;

Specific gravity:

0.35 Up to but not including 0.5.

(C) Compacted snow.

Snow which has been compressed into a solid mass that resists further compression and will hold together or break up into chunks if picked up;

Specific gravity:

0.5 And over.

This information is vital to airports, Space Ports, Cosmodromes operations.

(c) Slush.

Water saturated snows which with a heel and toe slap down motion against the ground will be displaced with a splatter;

Specific gravity: 0.5 Up to 0.8.

247 At last I am slowly winning this case of defining terms used in flight operations, which we must understand.

248 Special VFR flight

A controlled VFR flight authorised by air traffic control to operate within a control zone under meteorological conditions below the visual meteorological conditions.

249 Surveillance radar

Radar equipment used to determine the position of an aircraft or Inverse-Gravity-Vehicle in range and azimuth.

250 Taxiway

A defined path, on a land aerodrome, selected or prepared for the use of taxiing aircraft.

251 Terminal control area

A control area normally established at the confluence of **ATS** routes in the vicinity of one or more major aerodromes.

252 Threshold

The beginning of that portion of the runway usable for landing.

253 Touchdown

The point where the nominal glide path intercepts the runway.

254 NOTE. –

Touchdown as defined above is only a datum and is not necessarily the actual point at which the aircraft will touch the runway.

255 Track

The projection on the earth's surface of the path of an aircraft or Inverse-Gravity-vehicle, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

256 Transfer of control point.

257 VFR

The symbol used to designate the visual flight rules.

258 VFR flight

A flight conducted in accordance with the visual flight rules.

259 Visibility

The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night.

260 Visual approach

An approach by an IFR flight when either part or all of an instrument approach procedure is not completed and the approach are executed in visual reference to terrain.

261 Visual meteorological conditions

Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.

262 NOTE. – The specified minima are contained in chapter 4 of Annex 2.

263 VMC

The symbol used to designate visual meteorological conditions.

264 I have covered most terms, which are involved, which we must know and understand. If there is going to be any chance of us creating **STARSHIP EXPLORER**. Alternatively, in fact any other **INVERSE-G-VEHICLE** projects.

265 It is not the question of if, or if not I am capable of doing this job. But more to the point that if any accident occurs, the law will stop all work by us, and leave me with no option but to give it freely to the powers to be.

266 From which none of us will benefit.

267 Therefore, I cannot have the lightest accident of any kind in relation to the **SEARL TECHNOLOGY**, which the media could use to increase their sales.

268 That are why I am presenting all the facts within these documents so that if anyone can spot a problem they can inform me of that fact.

272 Or if you know of a better way, or cheaper way of doing any part thereof, you can inform me, so the matter can be discussed in more details.

The Searl Technology is a people's project, and if the people do not support it, they will lose it.

273 I want the very best within this technology, we can, and I am determined to achieve just that.

274 That report being discussed here continues as follows:-

(i) Flight information centres and area control centres shall have available for transmission to aircraft on request an appropriate number of QNH reports or forecast pressures for the flight information regions and control areas for Which they are responsible.

(ii) The transition level shall be included in approach clearances when so prescribed by the appropriate authority or requested by the pilot.

(iii) A QNH altimeter setting shall be included in approach clearances or clearances to enter the traffic circuit and in taxi clearances for departing aircraft, except when it is known that the aircraft already have received the Information.

(iv) A **QFE** altimeter setting shall be provided to aircraft or Inverse-Gravity-Vehicle on request or on a regular basis in accordance with local arrangements;

It shall be the **QFE** for the aerodrome elevation except for:

(a) Instrument runways,

If the threshold is 2 metres (7 feet) or more below the aerodrome elevation, and

(b) Precision approach runways,

In which cases the **QFE** for the relevant runway threshold shall be provided.

(v) Altimeter settings provided to aircraft shall be rounded down to the nearest lower whole millibar.

(vi) Position Reporting

(vii) Transmission of Position Reports

A. On routes defined by designated reporting points, position reports shall be made when over or as soon as possible after passing each designated compulsory point, except as provided in 273.

Additional reports over other points may be requested by the appropriate air traffic services unit when so required for air traffic services purposes.

B. On routes not defined by designated reporting points, position reports shall be made when crossing or as soon as possible after crossing, each designated compulsory reporting line.

Alternatively, in the absence of designated reporting lines, as soon as possible after the first half-hour of flight and at hourly intervals thereafter.

Except as provided in 273.

Additional reports, at intermediate position lines or at shorter intervals of time, may be requested by the appropriate air traffic services unit when so required for air traffic services purposes.

273 Under conditions specified by the appropriate **ATS** authority, flights may be exempted from the requirement to make position reports at each compulsory reporting point, line or interval.

In applying this paragraph, account should be taken of the meteorological requirement for making, recording and reporting of routine aircraft observations.

274 NOTE. –

This is intended to apply in cases where adequate flight progress data are available from other sources, e.g. ground radar, and in other circumstances where the omission of routine reports from selected flights is found to be acceptable.

275 The position reports required by 273 and 274 shall be made to the air traffic services unit serving the airspace in which the aircraft or Inverse-Gravity-Vehicle is operated.

In addition, when so prescribed by the appropriate **ATS** authority in aeronautical information publications or requested by the appropriate air traffic services unit, the last position report before passing from one flight information region or control area to an adjacent flight information region or control area shall be made to the air traffic services unit serving the airspace about to be entered.

276 If a position report is not received at the expected time, subsequent control shall not be based on the assumption that the estimated time is accurate.

Immediate action shall be taken to obtain the report if it is likely to have any bearing on the control of other aircraft or Inverse-Gravity-Vehicle.

277 Contents of Position Reports

278 The position reports required by 273 and 274 shall contain the following elements of information, except that elements (4) and (5) may be omitted from position reports transmitted by radiotelephony, when so prescribed based on regional air navigation agreements:

(1) Aircraft or I-G-V identification.

(2) Position

(3) Time

(4) Flight level or altitude

(5) Next position and time over

279 Yes, this may well sound like a load of bullshit, but rest assured that this bullshit is highly active stuff, as you will see when I explain the operation of the **INVERSE-G-VEHICLE** project, so that it conforms as tightly as possible to airline operation.

280 NOTE. –
Omission of element (4) may be possible when flight level or altitude, as appropriate, derived from **SSR** mode C information can be made continuously available to controllers in a labelled form and when adequate procedures have been developed to guarantee the safe and efficient use of **SSR** Mode C information.

281 Reporting of Operational and Meteorological Information

282 When operational and / or routine meteorological information is to be reported by an Aircraft en route at points or times where position reports are required in accordance with 273 and 274, the position report shall be given in the form of an air-report.

Special airport observations shall be reported as special air-reports, as soon after they have been made as it practicable.

283 Contents of air-reports

284 Air-reports shall give information relating to such of the following elements as are necessary for compliance with 285:

Section 1. Position information:

(1) Aircraft identification

(2) Position

(3) Time

(4) Flight level or altitude

(5) Next position and time over

Section 2. Operational information:

(6) Estimated time of arrival

(7) Endurance

Section 3. Meteorological information:

(8) Air temperature

(9) Wind

(10) Turbulence

(11) Aircraft icing

(7) Supplementary information

285 Section 1 of the air-report is obligatory, except that element (5) thereof may be omitted when so prescribed on the basis of regional air navigation agreements.

Section 2 of the air-report, or a portion thereof, shall only be transmitted when so requested by the operator or his designated representative, or when deemed necessary by the Pilot-in-command.

Section 3 of the air-report, or a portion thereof, shall be transmitted in accordance with **ICAO** meteorological procedures.

278 **NOTE. –**

While element (4), flight level or altitude, may, in accordance with Part II, 13.2.1, be omitted from the contents of a position report transmitted by radiotelephony when so prescribed on the basis of regional air navigation agreements, that element may not be omitted from Section 1 of an air-report.

279 Are you confused at a much higher level, if so, do not worry about it?

280 John is here to sort it out for you later in this discussion, for that is the purpose of these documents to solve all problems, which will be involved within this research.

281 Compilation of air-reports

282 Air-reports containing a Section 3 shall be recorded on the AIREP form.

Forms based on the model **AIREP** form at Appendix

Shall be provided for the use of flight crew in compiling the reports.

The detailed instructions for recording and reporting as given at Appendix 1 shall be complied with.

283 NOTE. –

The recording and reporting instructions may conveniently be printed on the back of the **AIREP** form.

284 Transmission of air-reports

285 The formats of messages and the phraseologies or data conventions given at Appendix 1 shall be used by flight crew when transmitting air-reports and by air traffic services personnel when re-transmitting such reports.

286 NOTE. –

Increasing use of air-reports in automated systems makes it essential that the elements of such reports be transmitted in the same order and form prescribed.

287 Aircraft or Inverse-Gravity-Vehicle observations during climb-out or approach

288 Aircraft or Inverse-Gravity-Vehicle observations made during the climb-out and approach phases of flight shall be reported as soon as is practicable.

289 Forwarding of Meteorological Information

290 Air traffic services units shall forward without delay to their associated meteorological offices, in accordance with local arrangements, meteorological information received from aircraft in flight.

In the case of air-reports which contain a Section 3,

Sections 1 and 3 shall be forwarded.

291 I have to make a break somewhere in this report as there are so many pages involved, what I have covered here were changes which were made on 04.02.1971, 04.02.1972 and 12.08.1976 to the Tenth Edition of that report.

292 These rules were made for the use of aircraft, and not **INVERSE-G-VEHICLES**.

As such, I need to convert their laws to meet my requirements with the minimum of change.

293 That is some task.

294 But not beyond possibilities.

295 First, let us look at the problem before us.

296 Aircraft have to take a run, before they can start their climb-out, which not only take space and time for the run, then time and space for the climb-out.

297 Agreed that the time factor is getting shorter.

298 Agree that not all that space needed in runway just to reach a stage, in which you can jump off into free space, is required by the Inverse-Gravity-Vehicle, creating a massive savings in cost and maintenance.

299 This Document released by authority of:

Prof. John Roy Robert Searl. Head of Human studies.
Manned Flight Division.
Swallow Command Aviation Division.