

# INVENTIONS.

2008

## PART 16.

In the beginning there was nothing – but an empty space to our understanding – then slowly over time bits of rubbish linked up – until this planet was formed.

Slowly over time more rubbish took on life forms, until lot of rubbish eventually formed us – and in turn we are dumping a lot of rubbish which unfortunate will kill this planet; thus us included.

It is to this rubbish problem that I am working to solve; to stop the spread of creating the wrong world; into the right world for all mankind regardless and all creatures great and small except bacteria and virus which I wish this world to make it unpleasant for their existence; the cost to all of us would be a massive savings in health problems, lost of time at work.

I know that in the UK the Government are asking councils to do what they can, to clean up the health situation that now exist, but to my eyes they are only just touching the skin of the problem they have no technical knowledge by which they can design the perfect solutions for their area.

But what I can do to try to solve the energy and transport systems problems; even if my words fall upon deaf and dumb people ears, which have no interests in the public real health and security domain – I still must try regardless of the situation.

To meet my intellectual and property plus copyrights; I must inform the public about everything that has happen and the date in which that took place; backed up with photos where it is still possible to do so. This is to protect this technology from those who have robbed me over the years from ownership of my technology.

Documents shown here are still operational, and any updates that come to light upon any document shown will be updated. This is my world – the world of reality – a world in which we are but a naked ape.

This book gives you insight on what I know and what I understand and how I am applying that knowledge to create a better world for all mankind regardless. It covers about all technical and scientific domains now existing with our extra findings added.

So many of you want help to understand this world of mine – to which I have no objection at all – united in the effort to put right what we have put wrong over time is no quick result – its taken time to bugger up this planet; it will take time to put it right if we hurry up and make that effort.

Before I continue this book, let me wish everyone of you a year of happiness; good health and a year to remember. I do appreciate that many will die this year from cause that should never had happen because you are replaceable; as the cost to the governments to put into place the safety net, is far too high.

If we all work together; there is a chance of cutting down this lost of life and property?

But it will be hard work now to win – but your effort would certainly help in that achievement, one man cannot do it alone – no one can – its team work.

The statement on swallow command.com reference to return of my property relates to goods which were stored at Terry's home: not any relationship of goods stolen by Peter, Martin, Ken, Luis plus another person; these goods of mine are still stolen.

Another point I wish to make known is that hundreds of e mails show that there is something wrong with today's education system – people do not understand what a mock-up is. WHY?

There are three states:

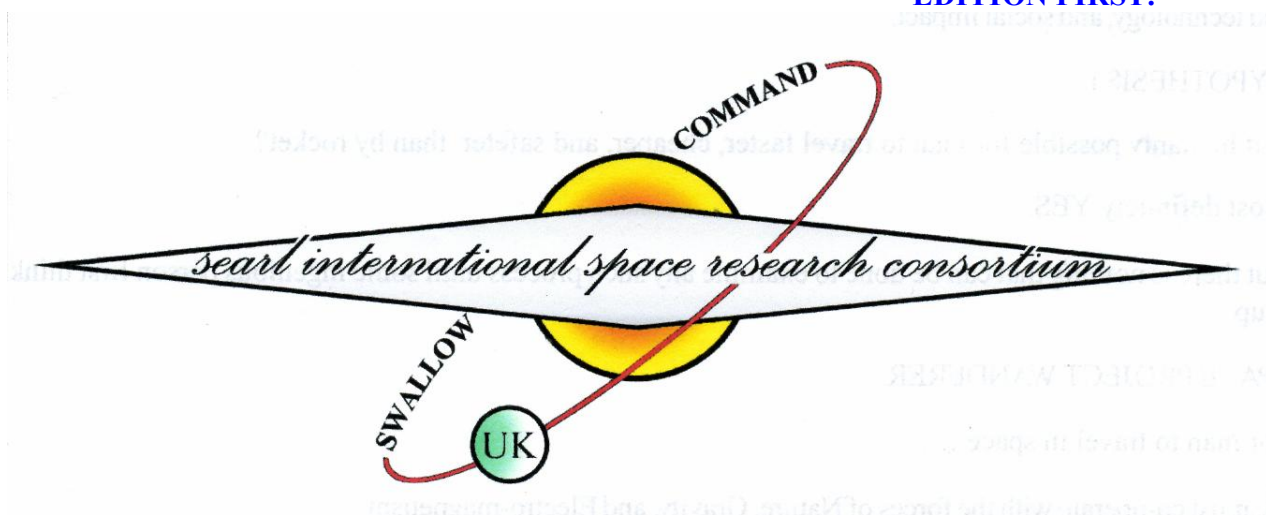
1. **Mock-up = means illustration of a product it does not move it's stationary.**
2. **Model, is a perfect copy of the original product but at a smaller scale.**
3. **Product the actual product for sale or use.**

The mock up of the SEG is to show its construction in a simple form but in this case is unusual that it functions when it was not intended to do so and, is a winner to attract investment and skill labour.

We have not so far modelled the S.E.G. But by use of graphics we are able to give a reasonable indication of its functions.

I do appreciate that one could mistake the mock-up as a model; but it is not so – it's just an illustration of one plate and 12 rollers would look like in the real S.E.G.

**DOC-SISRC-BS-E-COM-2  
PART 4  
DATE 29 September 1968  
EDITION FIRST.**



**Searl International Space Research Consortium UK.  
Tomorrows Energy and Transport systems.**

**LOCATION : Mortimer – Berkshire – England.**  
**SUBJECT : Economics.**  
**AUTHOR : John Roy Robert Searl.**

- 1: One of the critical factors of the Searl Technology is without doubt the economics involved.
- 2: Every company experiences this problem regardless of whom which requires much study to get your sums right.

3: ***THE EXPENDITURE METHOD.***

The expenditure account totals the spending of consumers, firms, the government and foreigners on domestically produced Searl Effect Generators (S.E.G) and services during the year.

4: As seen from earlier parts of this report, imports are excluded and the value of the physical increase in stocks and work in progress is added (since this represents new production).

5: Similarly, transfer payments by the government are excluded from 'general government final consumption'.

6: ***DOMESTIC EXPENDITURE, UK 1980.***

	(£ million)
Consumer's expenditure	135,403
General government final consumption.	48,337
Gross domestic fixed capital formation.	40,050
Value of physical increase in stocks and work in progress.	-3,596
	-----
Total domestic expenditure at market prices.	220,194
Exports of goods and services	63,198
	-----
Total final expenditure	283,392
Less imports of goods and services	57,832
	-----
Gross domestic product at market prices	225,560
Less taxes on expenditure	37,287
Plus subsidies	5,215
	-----
<b>Gross domestic product at factor cost</b>	<b>193,488</b>

Sample of running a company the accounts which has to be done.

7: The figures are collected from a variety of sources, such as the:

1. *National food survey.*
2. *H. M. Customs and Excise.*
3. *Inquiries by the Department of Trade and Industry.*
4. *Family expenditure.*
5. *Inland Revenue.*

Indeed, the number of sources increases the likelihood of double counting or omissions.

8: There are also problems related to timing of expenditure, particularly where long-term capital projects are involved.

9: As far as possible, transactions are recorded at the time when the expenditure is incurred, and at the market price actually paid.

10: Because of indirect taxes, market prices may be higher than the factor cost of production (and hence the value of factor incomes created). So that expenditure taxes must be deducted for consistency with the other measures (and by the same argument, subsidies must be added).

11: This factor cost adjustment is shown in the table above.

12: ***THE INCOME METHOD:***

This measure account for the incomes (before tax) of all individuals and firms in the economy during a year, plus the trading surplus of the public sector

13: ***GNP BY CATEGORY OF INCOME, U.K. 1980. (Up date version)***

	(£ million)
<hr style="border-top: 1px dashed black;"/>	
Income from employment	137,083
Income from self employment	18,394
Gross trading profits of companies	24,979
Gross trading surplus of public corporations	6,015
Gross trading of general government enterprises	170
Rent	13,231
Imputed charge for consumption of non-trading capital	2,138
<hr style="border-top: 1px dashed black;"/>	
Total domestic income	202,010
Less Stock appreciation	6,477
<hr style="border-top: 1px dashed black;"/>	
Gross domestic product (Income based)	193,533
Residual error	- 2,045
<hr style="border-top: 1px dashed black;"/>	
<b><i>Gross domestic product (expenditure-based)</i></b>	<b><i>193,488</i></b>
<hr style="border-top: 1px dashed black;"/>	

Table 3. U.K National Income sample updated from 1968.

14: One or two points in this Income Table require clarification:

***STOCK APPRECIATION:***

Changes in the *value* of stocks (as opposed to increases in the physical *volume* of stocks) do not represent new productive activity and are therefore deducted for consistency with the other measures.

***TRANSFER PAYMENTS:***

As all incomes are ‘gross’ (i.e. before tax); transfer payments must be excluded to avoid double counting, which I have covered in this article.

15: Much of the information in the income account is derived from Inland Revenue Tax statistics together with the accounts of central and local government and public corporations.

As I have already mentioned, certain economic activities are likely to be unrecorded, giving rise to what is known as the ‘hidden’ or ‘black’ economy see the next part 17 for details.

16: ***THE PRODUCT (OR OUTPUT) METHOD:***

This method accounts for the annual value-added of different industries in the production of goods and services.

Searl International Space Research Consortium are not yet in the production side of the Searl Effect generator (S.E.G) as it is involved in the direct research and development for a mass production system at this stage.

But to understand all the requirements of operation of such a company is a must. That is why I am showing what it will take to run such a company.

17: ***GROSS DOMESTIC PRODUCT BY INDUSTRY. U.K. (Update 1980):***

	<b>(£ million)</b>
<hr style="border-top: 1px dashed black;"/>	
Agriculture, forestry and fishing	4,296
Petroleum and natural gas	7,649
Other mining and quarrying	3,222
Manufacturing	48,060
Construction	13,025
Gas, electricity and water	5,803
Transport	10,084
Communication	5,326
Distributive trades	19,328
Insurance, banking, finance and business services	18,288
Ownership of dwellings	11,996
Professional and scientific services	25,467
Miscellaneous services	18,734
Public administration and defence	13,987
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<b>Total</b>	<b>205,265</b>
<b>Adjustment for financial services</b>	<b>-9,732</b>
<b>Residual error</b>	<b>-2,045</b>
<hr style="border-top: 1px dashed black;"/>	
<b>Gross domestic product at factor cost</b>	<b>193,488</b>
<hr style="border-top: 1px dashed black;"/>	

Table 4. U.K. Domestic product: update 1980. (Replace 1968 data)

18: The '*adjustment for financial services*' represents net interest receipts, which is excluded to avoid double counting.

Similarly, I have noted that only the value added to production by each industry is counted, which avoids double counting of the output of other industries or the inclusion of imported components (which are not a part of *domestic* output).

19: Other problems include estimating the value of payments in kind and the value of output of workers with no tangible product (e.g. teachers).

The provision of my self work which so far to date never been paid for – promises and promises but in reality nothing and that is a FACT.

20: Another point while I am on this subject:

The provision of factor services for which no income is paid (e.g. do-it-yourself work, housewives) is excluded from the accounts.

21: The main sources of information for these statistics are the annual census of production and surveys by individual government departments.

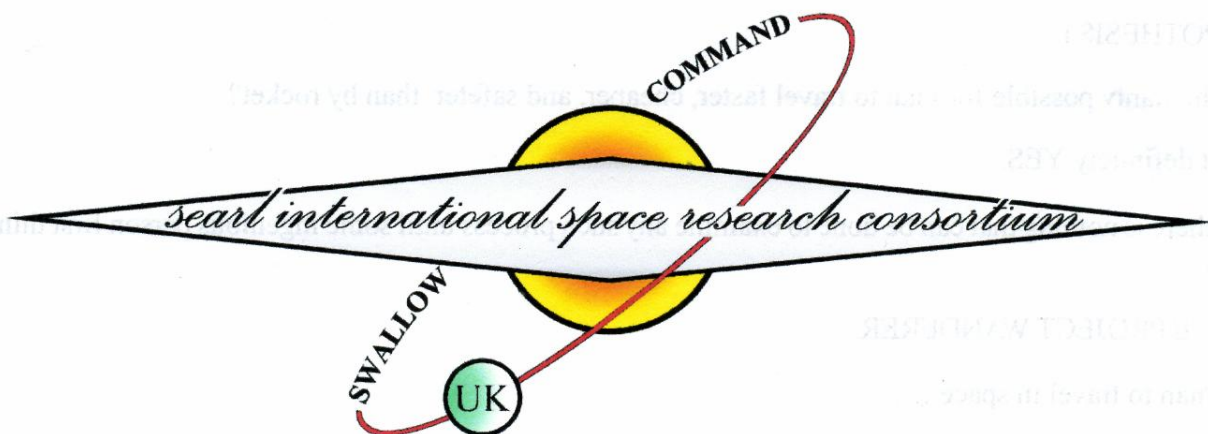
This document has been released by the authority of:



***Prof. John Roy Robert Searl.***  
***Searl International Space Research Consortium.***  
***Tomorrow's Energy and Transportation Systems.***  
***Research and development Department.***

22: The Searl Effect Technology covers Energy and Transportation systems, not only that it covers manufacturing engineering, instrumentation manufacturing, test equipment, tools and materials and it covers all sciences and technology known to man with a major increase of knowledge gain from research studies.

***DOC-SISRC-MFD-AOC-1-1.***  
***DATE: 21<sup>TH</sup> August 1968.***  
***EDITION: First.***



***Searl International Space Research Consortium.***  
***Mortimer – Berkshire – England.***

***LOCATION: Headquarters – Berkshire – England.***  
***DIVISION: Manned Flight.***  
***SUBJECT: Air Operator's Certificate.***



***AUTHOR:***            *John Roy Robert Searl.*  
***STATUS:***            *Head of research and development.*  
***PART:***                *Three.*

23:    ***CREW TO BE CARRIED.***

To my understanding; it will be sufficient if the minimum crew for public and space exploration transportation for each Inverse-Gravity-Vehicle (I-G-V).

***NOTE:***

That the minimum crew for public transport or space missions will not necessarily be the same as the minimum crew specified in the Inverse-Gravity-Vehicle (I-G-V-) certificate of airworthiness.



- 24:    Except where the flight crew is limited to one or two pilots, brief instructions should be included as to the order and circumstances in which command is to be assumed by members of the crew.
- 25:    Detailed instructions should be included in the manual as to the circumstances in which co-pilots may be permitted to fly the Inverse-Gravity-Vehicle (I-G-V).
- 26:    The Air Navigation Order specifies areas of the world through which the Inverse-Gravity-Vehicle engaged on a flight for the purpose of public transport or a mission in space shall carry a flight navigator as a member of the crew or, alternatively, navigation equipment specifically approved for the purpose by the Authority.

If Searl International Space Research Consortium wishing to dispense with the carriage of a

Separate flight navigator in favour of the alternative requirement should apply to the Flight Operations Inspectorate for details of the conditions to be met.

27: ***DUTIES OF CREW AND OTHER OPERATING STAFF:***

In this context, the term '*operating staff*', as distinct from the Inverse-Gravity-Vehicle (I-G-V) crew, should be taken to mean staff having specific duties, in relation to particular missions, which fall within the general pre-mission and in-flight responsibility of the Inverse-Gravity-Vehicle (I-G-V) commander.

The manual should therefore define, where appropriate, the duties and responsibilities of people employed as:

- 1: Flight dispatch officers.
- 2: Flight watch officers.
- 3: Mission planning assistants who prepare navigational flight plans and mission briefs, and compute mission requirements, RTOWs and aerodrome operating minima;
- 4: Rostering and scheduling staff;
- 5: Traffic officers or '*loadmasters*' responsible for calculating maximum payloads and / or food – tools – equipment, or for supervising the loading of Inverse-Gravity-Vehicle (I-G-V) and completing load / trim sheets.

28: It is important in this connection that operating staff should be made fully aware of the overriding responsibility and the ultimate authority of the Inverse-Gravity-Vehicle commander.

Manuals should state specifically that if a commander considers it necessary, in order to secure the safety of a particular mission, He / she is authorised to apply greater safety margins (eg aerodrome operating minima, food / water / toilet products / medical reserves and terrain clearance standards) than those prescribed by Searl International Space Research Consortium for normal operations.

29: In defining the duties of members of the crew, Searl International Space Research Consortium should include instructions on:

The briefing of work force or passengers on emergency procedures and equipment (including, where appropriate, space jackets and automatic drop-out oxygen equipment), and at no time is smoking allowed and on the use of personal radios, tape recorders, etc in flight or missions.

30: ***NOTICE:***

***NO MEMBERS OF THE MISSION CREWS AND STAFF ARE ALLOWED TO SMOKE AT ANY TIME. SMOKERS ARE NOT ACCEPTED FOR FLIGHT MISSIONS AT ANY TIME. FOR HEALTH REASONS OF THE STAFF.***

31: The responsibility, in the absence of competent ground engineering staff, for supervising refuelling of water and ensuring that filter caps, refuelling valves, freight hold doors, etc are secure.



6: The responsibility, in the absence of competent traffic staff, for supervising the loading of the Inverse-Gravity-Vehicle (I-G-V):

7: The duties of special personnel such as car marshallers and animal attendants.

32: Special consideration should be given to instructions on the arrangement of flight / mission deck duties between the members of the flight / mission crew, and the procedures for double checking altimeter settings, and the selection and identification of radio aids.

The risk of confusion or a serious oversight can be eliminated only if suitable routine procedures are laid down and meticulously observed both in training and in the course of normal operations.

Operators are therefore required to specify such procedures in detail, with particular reference to the division of duties during lift-off and in the execution of an instrument approach procedure and overshoot in IMC, and to give them special emphasis to all training and periodical tests.

The procedure for instrument approach in IMC in multi-crew Inverse-Gravity-Vehicles (I-G-V) should relieve the commander of as much of the workload as possible, and through a proper division of duties and monitoring functions throughout the descent, provide adequate safeguards against error or omission.

The difficulty of transition from instrument in poor visibility should be taken fully into account, together with the need for a clear and systematic procedure for initiating overshoot if there is any doubt about the advisability of continuing the approach by visual reference to the ground.

33: ***LIMITS ON FLIGHT / MISSION, DUTY AND REST PERIODS:***

There are detailed statutory provisions in this connection and Searl International Space Research Consortium must be familiar with the relevant part of the Air Navigation Order, and with the Requirements published by the Authority (CAP 371).

34: In accordance with the statutory provisions, 'Searl International Space Research Consortium' schemes for the prevention of fatigue of all crew must be approved by the Authority and incorporated in the operations manuals – which was confirmed in 1968 as four hours on and eight hours off as a basic setting of operations for mission crews.

Any amendment to the operation manual in this connection must be approved by the Authority in advance.

Applications for approval of schemes, and for amendments or variations, should be addressed to the Flight Operations Inspectorate or General Aviation Branch as appropriate.

35: Searl International Space Research Consortium should state in their scheme the minimum times allocated to pre-flight / mission preparation and immediate post-flight / mission activity.

36: If instructions, separate from the main operations manual, are issued for the guidance of rostering, planning or scheduling staff, they must be compatible with the provision of the scheme and a copy must be lodged with the Authority.

37: Provision is made in the Requirements (CAP 371) for Inverse-Gravity-Vehicles commanders to exercise their discretion to extend the flying / mission duty period beyond the maximum that may normally be scheduled, and to reduce a rest period.

Copies of reports by commanders on the exercise of discretion, whether or not required to be submitted to the Authority, must be retained by Searl National Space Research Consortium for six months.

Reports should be in the standard form appended to (CAP 371).

- 38: Instructions for crews as to their personal responsibilities for the avoidance of fatigue should include clear guidance on abstention from alcoholic drinks for a suitable period prior to flight.

The minimum acceptable period by law will be eight hours.

Searl International Space Research Consortium will not accept any crew member who can not show a urine sample clear of alcoholic drinks trace within twelve hours before departure time.

- 39: Inverse-Gravity-Vehicles crews should also be advised of the precautions to be taken if they are undergoing medication.

Searl International Space Research Consortium will release information circulars issued from time to time on the subject will form a useful basis for instructions in manuals.

Searl International Space Research Consortium encountering any special difficulty in framing their instructions may call on the Authority's Medical Centre for advice.

- 40: Responsibility within Searl International Space Research Consortium for issuing instructions and making decision on questions of flight / mission duty and rest periods, and for processing discretion reports, should be clearly defined and assigned to a member of the executive staff.

The name of the person concerned, or the title of the office that he holds, should be included in the operational manual.

That person was John Roy Robert Searl Superintendent of Documents UK

- 41: Searl International Space Research Consortium is required to maintain and provide readily interpreted records for each crew member.

It follows that there must be suitable arrangements for collecting the information necessary to compile the records.

Accurate records are essential to person's responsibility for the rostering of crews.

- 42: Since 1968 I have not been able to keep records those I had got were removed from my control by those wishing to stop my work.

- 43: Today, January 2008, this work has been restarted and these past legal papers still are operating today, therefore I am releasing them again as they were with the exception photos or graphics relating too or technical drawings related to it are added which I could not do then as I had no means to so.

- 44: In part 15; I started to show the flight departure times as from Gatwick and Amsterdam airports, I shall now continue that report of 1967 added to this section of this report, based upon the 24 hour system As from Auckland Airport. New Zealand

Time	Destination	Time	Destination	Time	Destination	Time	Destination.
0000		0155		0350		0545	
0000		0155		0350		0545	
0005		0200		0355		0550	
0005		0200		0355		0550	
0010		0205		0400		0555	
0010		0205		0400		0555	
0015		0210		0405		0600	AKL EX
0015		0210		0405		0600	AKL EX
0020		0215		0410	LHR SE	0605	
0020		0215		0410		0605	
0025		0220		0415		0610	
0025		0220		0415		0610	
0030		0225		0420		0615	NYC SE
0030		0225		0420		0615	NYC SE
0035		0230		0425	DEN SE	0620	
0035		0230		0425	DEN SE	0620	
0040		0235		0430		0625	BOM SE
0040		0235		0430		0625	BOM SE
0045		0240		0435		0630	
0045		0240		0435		0630	
0050		0245		0440		0635	
0050		0245		0440		0635	
0055		0250		0445		0640	
0055		0250		0445		0640	
0100		0255		0450		0645	
0100		0255		0450		0645	
0105		0300		0455		0650	
0105		0300		0455		0650	HKG SE
0110		0305		0500		0655	
0110		0305		0500		0655	
0115		0310		0505		0700	
0115		0310		0505		0700	
0120		0315		0510		0705	
0120		0315		0510	LHR SE	0705	
0125		0320		0515		0710	
0125		0320		0515		0710	
0130		0325		0520		0715	
0130		0325		0520	SIN SE	0715	
0135		0330		0525		0720	
0135		0330		0525		0720	
0140		0335		0530		0725	
0140		0335		0530	BUE SE	0725	
0145		0340		0535		0730	
0145		0340		0535		0730	
0150		0345		0540		0735	
0150		0345		0540		0735	

This is part of a page of work out of 1967, as it is impossible to scan such large pages on A4 Green is for arrivals and Red is for departures. SE = Super Express which calls at a number of airports on its circular route and EX = is a non-stop direct flight to destination. Auckland Airport. New Zealand

Time	Destination	Time	Destination	Time	Destination	Time	Destination.
0740		0935		1130		1325	
0740		0935		1130		1325	
0745		0940		1135		1330	
0745		0940		1135		1330	
0750		0945		1140		1335	
0750		0945		1140		1335	
0755		0950		1145		1340	
0755		0950		1145		1340	
0800	DEN SE	0955		1150		1345	
0800		0955		1150		1345	
0805		1000		1155		1350	
0805		1000		1155		1350	HKG SE
0810		1005		1200	HKG SE	1355	
0810		1005		1200		1355	
0815		1010		1205		1400	DEN SE
0815		1010		1205		1400	
0820		1015		1210	LHR SE	1405	
0820		1015		1210		1405	
0825		1020		1215		1410	
0825		1020		1215	NYC SE	1410	
0830	SIN SE	1025		1220		1415	
0830		1025		1220		1415	
0835		1030		1225		1420	
0835		1030	BUE SE	1225	BOM SE	1420	
0840		1035		1230		1425	
0840		1035		1230		1425	
0845		1040	BOM SE	1235		1430	
0845		1040		1235		1430	
0850		1045		1240		1435	
0850		1045		1240		1435	
0855		1050		1245		1440	LGW EX
0855		1050		1245		1440	
0900	BUE SE	1055		1250		1445	
0900		1055		1250	SIN SE	1445	
0905		1100		1255		1450	
0905		1100		1255		1450	
0910		1105		1300		1455	
0910		1105		1300		1455	LGW EX
0915		1110		1305		1500	BUE SE
0915		1110		1305		1500	
0920		1115	NYC SE	1310		1505	
0920		1115		1310	LHR SE	1505	
0925		1120		1315		1510	
0925	DEN SE	1120		1315		1510	
0930		1125		1320		1515	
0930		1125		1320		1515	

This is part of a page of work out of 1967, as it is impossible to scan such large pages on A4. And my hand writing might be difficult to read. Green = arrivals: Red = departures: SE = Super express which operates a chain of airports in a circular operation. EX = none stop express between just 2 airports. This is Auckland airport. New Zealand.

Time	Destination	Time	Destination	Time	Destination	Time	Destination.
1520		1715	NYC SE	1910		2105	
1520		1715		1910		2105	
1525		1720		1915		2110	LHR SE
1525		1720		1915		2110	
1530	SIN SE	1725		1920		2115	
1530		1725	BOM SE	1920		2115	
1535		1730		1925		2120	
1535		1730	BUE SE	1925		2120	
1540		1735		1930		2125	
1540		1735		1930		2125	
1545		1740		1935		2130	
1545		1740		1935		2130	
1550		1745		1940		2135	
1550		1745		1940		2135	
1555		1750		1945		2140	BOM SE
1555		1750	HKG SE	1945		2140	
1600		1755		1950		2145	
1600		1755		1950		2145	
1605		1800		1955		2150	
1605		1800		1955		2150	
1610		1805		2000	AKL EX	2155	
1610		1805		2000		2155	
1615		1810		2005		2200	BUE SE
1615		1810		2005		2200	
1620		1815		2010	LHR SE	2205	
1620		1815	NYC SE	2010		2205	
1625		1820		2015		2210	HKG SE
1625	DEN SE	1820		2015		2210	
1630		1825		2020		2215	
1630		1825		2020		2215	
1635		1830		2025		2220	
1635		1830		2025		2220	
1640	BOM SE	1835		2030		2225	
1640		1835		2030		2225	
1645		1840		2035		2230	
1645		1840		2035		2230	
1650		1845		2040		2235	
1650		1845		2040		2235	
1655		1850		2045	BOM SE	2240	
1655		1850	SIN SE	2045		2240	
1700	HKG SE	1855	NYC SE	2050		2245	
1700		1855		2050		2245	
1705		1900		2055		2250	
1705		1900		2055		2250	
1710		1905		2100	DEN SE	2255	
1710		1905		2100		2255	

This is part of a page of work out of 1967, as it is impossible to scan such large pages on A4. As you can appreciate that these data is incomplete due to my first wife and family burnt so much of my work outs in the effort to stop this work – but some day I can fill these figures in on this site without having to re-do them – it will not be yet far too busy recovering from the last robbery which took place here.

Time	Destination	Time	Destination	Time	Destination	Time	Destination.
2300	SIN SE	2305		2310		2315	NYC SE
2300		2305		2310		2315	
2320		2325		2330		2335	
2320		2325		2330		2335	
2340		2345		2350		2355	
2340		2345		2350		2355	

This completes the Auckland Airport operation flight times for I-G-V operation there

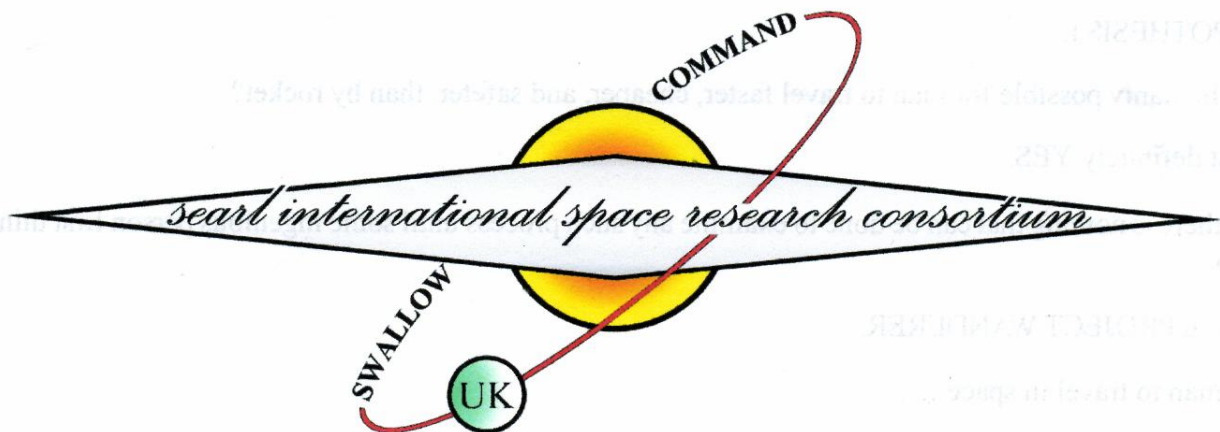
45: This document has been released to the general public by the authority of:



**Prof. John Roy Robert Searl. Head of R&D  
Searl International Space Research Consortium  
Manned Flight Division.  
Mortimer – Berkshire – England.**

46:

**DOC-SISRC-P-AM-1  
DATE: 26<sup>TH</sup> Nov.1968.  
Edition: First.**



***Searl International Space Research Consortium UK  
Mortimer – Berkshire – England.***

**LOCATION : Mortimer – Berkshire – England.  
SUBJECT : Basic Physics.  
AUTHOR : John Roy Robert Searl.  
AUTHORITY : Superintendent of Documents – UK.  
PART : Two.**



47: ***INTRODUCTION:***

I have to admit that I am truly amazed and please that so many young men and women at school around the world; have sent e-mails to me for help on what should they study in physics, which I have sent reply back to each.

In fact, this book being released in parts at a time show you what I knew and understood and used in this undertaking termed the Searl Effect.

I am aware that so called experts lay claim that I could not had invented this technology – but failed absolutely to name who did invent it.

48: This book shows that for an invention to come into reality triggers have to fall in place in the correct order – not one invention to date was created by any other means – No, there were no aliens or men in black that gave that secret on how to do it to them.

49: In every one of us the past, present and future inventions are in your brain, but until the correct triggers appear in the correct order the new inventions can not materialise.

50: I shall now inform you on how I looked at reality so long ago now; by releasing again that document that some of you have a copy of in my books that were released in the past.

51: Therefore in this part 16, I shall try to examine the most fundamental ideas that Homo sapiens have about physics – the nature of things as we see them at the present time.

I shall not discuss the history of how I know that all these ideas are true, in this part of the book; you will learn these details in due time.

52: The things with which I concern my self in science appear in myriad forms, and with a multitude of attributes.

For example:

If I stand on the shore and look at the sea, I see water, the waves breaking, and the foam, the sloshing motion of the water, the sound, the air, the Winds and the clouds, the sun and the blue sky, and light; there is sand and there are rocks of various hardness and permanence, colour and texture.

53: There are animals and seaweed, hunger and disease, and to the observer on the beach; there may be happiness and thought.

54: Any other spot in nature has a similar variety of things and influences.

It is always as complicated as that, no matter where it is.

55: Being a structure which lives in the world of reality it should be clear to anyone that my curiosity demands that I ask questions, that I try to put things together and try to understand this multitude of aspects as perhaps resulting from the action of a relatively small number of elemental things and forces acting in an infinite variety of combinations.

56: Strange as you read that you had no idea that I am explaining how I discovered the S.E.G. as both concepts are similar in function.

57: Another example:

Is the sand other than the rocks?

That is, is the sand perhaps nothing but a great number of tiny stones?

Is the moon a great rock?

If I understand rocks, would I also understand the sand and the moon?

Is the wind a sloshing of the air analogous to the sloshing motion of the water in the sea?

What is common to different kinds of sound?

How many different colours are there?

And so on.

58: In this way I try gradually to analyse all things, to put together things which at first sight look different, like that mock-up on the websites, with the hope that I may be able to reduce the number of different things and thereby understand them better.

59: To my understanding, a few hundred years ago, a method was devised to find partial answers to each question.

**1: Observation.**

**2: Reason.**

**3: Experiment**

Make up what I call the scientific method.

60: I shall have to limit my self to a bare description of my basic view of what is sometimes called *fundamental physics* or fundamental ideas which has arisen from the application of the scientific method.

61: What do I mean by “*understanding*” something?

I can imagine that this complicated array of moving things which constitutes “*the world*” is something like a great chess game being played by the gods, how many times that I have made that statement; that from where I sit and observe the more I observe the more the picture looks like the Greek myth of gods playing a game are, and we are the observers of the game

How often that I have stated: were those myths really reality and not fantasy, it leaves a big question in my mind as I study Homo sapiens actions as to what is reality and what is fantasy.

62: I do not know what the rules of the game; but I do understand by the law of the squares that all living things have two prime tasks to conform too:

**1: To degrade energy.**

**2: To reproduce its species.**

If you fail to conform you are trashed, as simple as that; the gods have no emotion whatsoever.

All that I am allowed to do is to watch the playing.

Of course, if I watch long enough, I may eventually catch on to a few of the rules to which I have been lucky to spot; and thus the *Searl Effect Technology* was conceived in the world of fantasy and given birth in the world of reality.

63: The rules of the game are what I mean by *fundamental physics*,

64: Even if I did know every rule, however, I might not be able to *understand* why a particular move is made in the game, merely because it is too complicated and my mind is limited.

This is a major point which I have quoted in this book a number of times; that knowing and understanding are two different domains – you might know that object is a woman – but you cannot understand why she is a woman unless you actually study that object.

In fact, today I sometimes find it hard to accept that it's a woman; because she just an image of fantasy of dress being presented to your senses – not a woman but clothes; and you will never know what that real woman in reality is like. That is what modern education does to you – blind you to reality.

65: If you play chess you must know that it is easy to learn all the rules, and yet it is often very hard to select the best move or to *understand* why a player moves as he does.

66: So it is in nature, only much more so; but I may be able at least to find all the rules through the Law of the Squares.

67: I must admit that actually, I do not have all the rules now – no one does amen!

Every once in a while something like castling is going on that I still do not understand.

68: Aside from not knowing all the rules, what I really can explain in terms of those rules is very limited, because almost all situations are so enormously complicated that I cannot follow the plays of the game using the rules, much less tell what is going to happen next.

69: I must, therefore, limit my self to the more basic question of the rules of the game.

If I know the rules, I consider that I '*understand*' the world.

70: How can I tell whether the rules which I "*guess*" at are really right if I cannot analyze the game very well?

There are, to my understanding, roughly speaking, three ways:

First, there may be situations where nature has arranged, or I arrange nature, to be simple and to have so few parts that I can predict exactly what will happen, and thus I can check how my rules work.

In one corner of the board there may be only a few chess pieces at work, and that I can figure out exactly.

A second good way to check rules is in terms of less specific rules derived from them.

For example:

The rule on the move of a bishop on a chessboard is that it moves only on the diagonal.

One can deduce, no matter how many moves may be made, that a certain bishop will always be on a red square.

71: So, without being able to follow the details, I can always check my idea about the bishop's motion by finding out whether it is always on a red square.

Of course it will be, for a long time, until all of a sudden I find that it is on a black square.

What happened of course is that in the meantime it was captured, another pawn crossed for queening and it turned into a bishop on a black square.

72: That is the way it is in physics.

For a long time I will have a rule that works excellently in an over all way, even when I cannot follow the details, and then some time I may discover a *new rule*.

73: From the point of view of basic physics, the most interesting phenomena are of course in the new places, the places where the rules do not work – not the places where they do work!

That is the way in which I discover new rules.

74: The third way to tell whether my ideas are right is relatively crude but probably the most powerful of them all.

That is, by *rough approximation*.

While I may not be able to tell why John moves this particular piece, perhaps I can *roughly* understand that he is gathering his pieces around the king to protect it, more or less, since that is the sensible thing to do in the circumstances.

In the same way, I can often understand nature, more or less, without being able to see what every little piece is doing, in terms of my understanding of the game.

75: At first the phenomena of nature were roughly divided into classes, *like heat, electricity, mechanics, magnetism, properties of substances, chemical phenomena, light or optics, X-rays, nuclear physics, gravitation, meson phenomena, etc.*

76: However, the aim is to see *complete nature* as different aspects of one set of phenomena.

That is the problem in *basic theoretical physics*, today – to find the laws behind experiment, to amalgamate these classes.

77: Historically, I have always been able to amalgamate them, but as time goes on new things are found.

78: I was amalgamating very well, when all of sudden x-rays were found.

Then I amalgamated some more, and mesons were found.

Therefore, at any stage of the game, it always looks rather messy.

A great deal is amalgamated, but there are always many wires or threads hanging out in all directions.

That is the situation today, to my understanding, which I shall try to describe through out this book,

79: Some historic examples of amalgamation are the following.

First, take *heat* and *mechanics*.

When atoms are in motion, the more motion, the more heat the system contains, and so heat and all temperature effects can be represented by the *laws of mechanics*.

80: Another tremendous amalgamation was the discovery of the relation between electricity, magnetism, and light, which were found to be different aspects of the same thing, which I call today the *electromagnetic field*.

81: Another amalgamation is the unification of chemical phenomena, the various properties, and the behaviour of atomic particles, which is in the *quantum mechanics* of chemistry.

82: The question is, of course, is it going to be possible to amalgamate everything, and merely discover that this would represent different aspects of one thing?

I must agree that nobody knows that answer.

All I know is that as I go along, I find that I can amalgamate pieces, and then I find some pieces that do not fit, and I keep trying to put the jigsaw puzzle together.

Whether there are a finite number of pieces, and whether there is even a border to the puzzle, is of course unknown.

It will never be known until I finish the picture, if ever.

What I wish to do here in this book is to see to what extent this amalgamation process has gone on, and what the situation is at present, in understanding *basic phenomena* in terms of the smallest set of principles,

To express it in a simple manner, what are things made of and how few elements are there?

83: If I compare all these definitions of science which I have used within this book with Alfred North Whitehead's definition of philosophy, "the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of my experience can be interpreted."

84: The comparison suggests that in dealing with its appropriately limited areas of human experience; science has a goal similar to the goal of philosophy, namely, understanding.

85: I agree that a study of science is an important part of a general education.

Scientists have been successful, as I have stated so many times “because first of all they have been very clever in choosing questions to answers which can be answered by the methods of science, and not choosing questions which science cannot answer; such as the Searl Effect Generator (S.E.G) or the Inverse-Gravity-Vehicle (I-G-V), even though these may be the more important questions.”

86: Now you have an insight to my interest and as to what concerned me in those early years and in fact still concerns me as to the reality of life and you are my biggest concern and problem in the development of a commercial deep space operation.

It is not the structure of the I-G-V that is the problem for space work – it’s the crew and staff which will have to be involved that is the prime factor of success.

87: This document has been released to the public by the authority of:



*Prof. John Roy Robert Searl. Lecturer / author / head of R&D.  
Tomorrow’s energy and transportation systems.*

88: Today, Tuesday January 15<sup>th</sup> 2008 at 1920 GMT, I received from John Thomas, Rochester, New York, USA an e-mail stating that the wife of Bill Sherwood; Rhoda Sherwood had died peacefully in her sleep.

I am saddened to hear this news as I knew Bill and Rhoda well; through the help they gave me in support and their time to this technology in the 60s.

To Bill: I wish you all the very best to the future and, through your loss I hope you will find happiness and may your health remain good throughout the year, and may the power be with you always.

Prof. Searl.

89: Today, Wednesday January 16<sup>th</sup> 2008 update received:

LAMP LAW POSES SKIN DANGERS:

The United Kingdom Government plans to ban traditional light bulbs in favour of energy saving bulbs by the end of 2011,

I must admit that the government has already supplied me with 2 x 20 watt Philips bulbs; one of which I replace the bedroom light with, which is claimed to be equal to 100W.

My verdict is that it is impossible to read a book or write in that light, some times on switch on  
20.



my pocket LED torch is brighter. The parcel also contain 2 x 8 watt Philips bulbs, which is equal to 40 watts; which I replaced the one in the kitchen, though its a poor quality, being rather a small space just about cope and it does increase the possibility of chopping off your finger.

In fact, when I took this place on I did in fact fitted all power saving lamps throughout – there are 2 lamp fittings in the living room and the lamp in the first fitting packed up in 2 days the other did survive 3 years then it was hardly used. There are certainly not cheap to buy from a pension – bloody costly.

In fact over a period of 5 years they have all been replaced by standard incandescent bulbs which are far cheaper to buy. Now the government are planning to get rid of the incandescent bulb, but in my opinion they should not do so because it could put 350,000 people with light sensitive skin at risk of severe and painful skin reaction as energy saving bulbs produce a more intense light than incandescent ones can seriously exacerbate skin conditions such as eczema. I myself must admit that I have not encountered such skin problems yet by using energy saving bulbs.

90: Today, Monday January 14<sup>th</sup>, 2008 at 1407 hours GMT received parcel from Morris in Thailand of the following goods.



I had spent two weeks phoning and e-mailing companies in the UK and the USA for these components for the wiring work which I have started undertaking here.

In the end I gave up and informed Morris about the problem, in which he did a search in Thailand and came up with these which I received, as shown here.

Which of course: will make my work much easier to undertake.

In this book I sure will show you the facts of reality regardless of whether you like to see and hear the truth or not; does not concern me at all.

My task is to re-build from the damage done in the last robbery that took place here, and I shall show you what it actually took to do.

Proof that what I stated here is precise – I was unable to find anywhere in the UK where I could obtain them – nor in the USA – the two USA companies I ordered them from just ignored my order on a stupid statement that my password was not correct – what crap I have to put up with. The business world is pushing online sale – yet cannot get their act right over customers ID-PW.



These ring connectors which I had in stock were far too large for the connections of the Euro plug



So thanks to Thailand my work here will be much easier to the start which I have made on the work.

91: Today, Monday January 14<sup>th</sup> 2008 at 1407 GMT, I received a parcel from Steven Simkins of Anchorage, Canada,

Let me confirm that over the years he has help John Thomas of Rochester, New York, USA; with equipment and not forgetting the help he gave to Morris, of California, USA; then add to this the help which he has given to THIS OLD MAN OF London, England.

This success is based entirely on team work to which I am just the leader of the gang; the concept of the future that is meant to be; clearly on youtube there are experts who have no idea what **TEAM WORK** means and you know who I mean.

It is people like Steven Simkins who assist a team in bringing from the domain of fantasy; products that will become the part of the domain of reality today or tomorrow, but they will arrive and become part of everyday existence, which add to our knowledge base; which will change the rules of the game of nature.

Everyday, without your knowledge you have played a part in changing the rules of nature in some small way, in time that small input will amount to a large output that can be studied in detail by scientists the world over, like I am watching you, watching me, watching you.



Here is the proof of that parcel guess you can see that its Teflon powder in the jar and 5 samples for some research I shall be carrying out here.

- 92: It is in my opinion that space; as a business: has the largest domain to employ people, and upon that issue I have been and have now restarting to evaluate the best option for commercially based operation projects.

For such an undertaking, I need to look at every single idea which can be assembling in units to create the required functions for the mission required.

Through this book you will see first hand the study work that has to go into such a project, much of which you may not feel to be of value – but then who can state what value is and what is not until you have investigated every possible point of such an idea.

***Fact 1: No aliens are coming to tell or show you how to do it.***

***Fact 2: No men in black will be coming to tell or show you how to do it***

If its going to be done, then we must do it and, the sooner we start that task at examine ideas the better

- 93: Thus the hard work to find the best solution for the pending project will be tough, as already the firms who handle the parts I used in the past have changed their market concept on what components they will market.



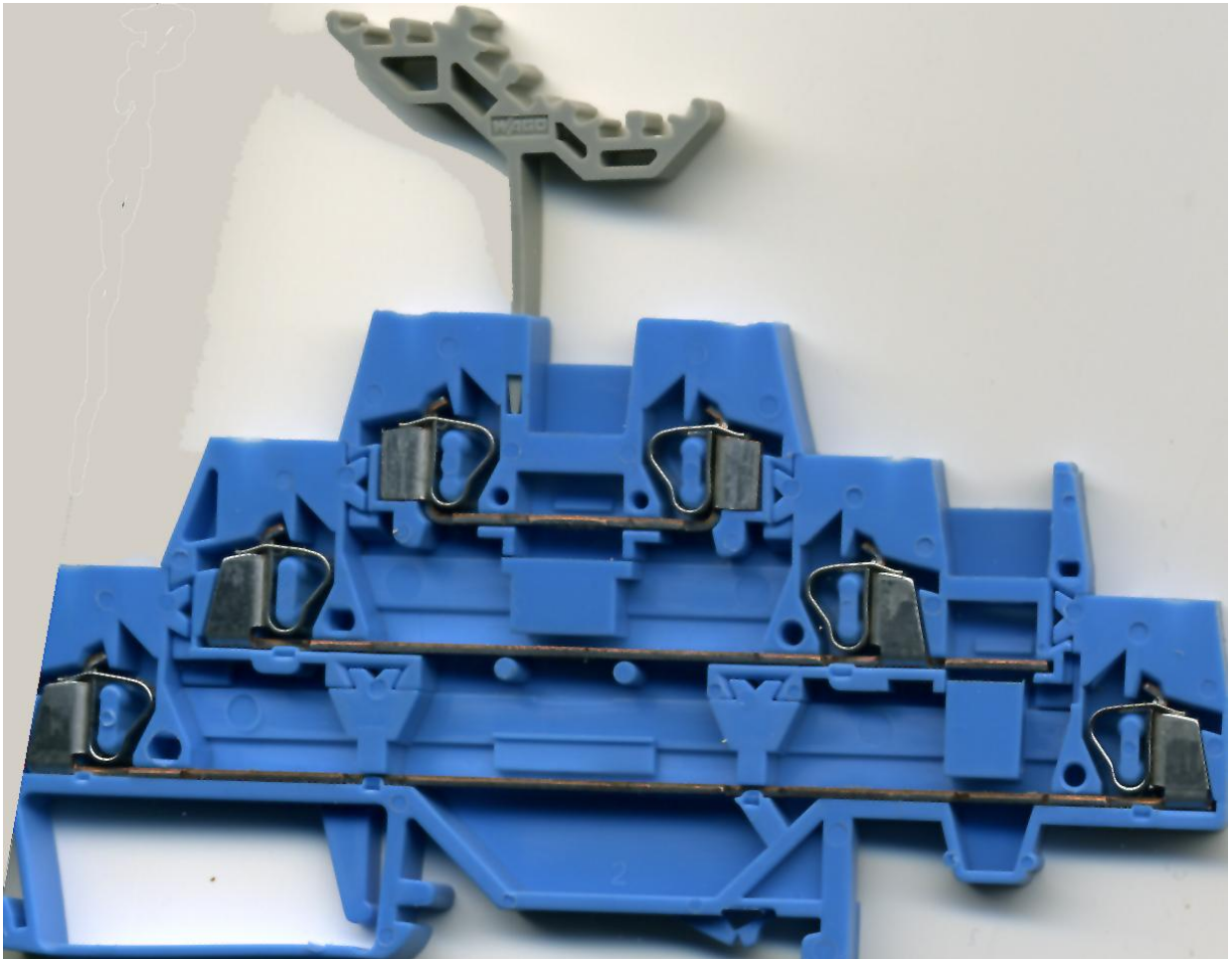
The components which you see in the photos in this book are components recovered from the past and being re-used, why the company stop producing them I have no idea, maybe I was the only customer for such components, and that long break from late 1968 until late 2007 no demand for such goods they switched to mobile phones and monitors etc.

Don't worry I do have a replacement products for the new project.



The principle of operation is just the same as the system which I am wiring now; agree man progress in technology and science is amazing, through out my life I have been bless to witness such changes, not all for the better interest of the planet as it appears that man is bent on destroying the planet then to save it.

At this moment in time I am not aware of the cost which will be involved in this choice of components.



This is just one of the old system components that were used in the past, having just a few left which are already wire up and operating in this new set up.

I have now replaced the two PCs monitors with a pair of the same model monitors for neatness of appearance. Larger screen as well so I can read the mail and what I am written to screen creating less eye strain.

- 94: Besides showing you the problems on component buying, I have to study every concept in energy use and systems under development as to how that could be employed in the new products such as the I-G-V.

I shall now look at the problem of taming power at 65nm and below.

The move to the 65 nm process node provides the benefits associated with smaller process geometries;

- 1: *Lower cost.*
- 2: *Higher performance.*
- 3: *Greater logic capacity.*

However, along with these benefits, to my understanding; is the 65 nm process brings with it new challenges related to power consumption, which comprises static and dynamic power.

- 95: To design something like an I-G-V you must fully understand the direction in which way science

and technology is heading, that is vital.

As semiconductors have moved to smaller geometries and system speeds amplified, increases in dynamic power have been manageable because device core voltages drop with each downward shrink at each process node.

Combining this with smaller parasitic capacitances (associated with the smaller transistors) and shorter, less capacitive interconnects between logic, reduces the rate of increase in dynamic power.

Conversely, static power is growing exponentially due to increasing transistor leakage.

These are issues which I have to evaluate in decision making upon selection of components, as an example: you go into the chemist shop for a condom the shop assistance has no idea what you hope to obtain from the function of such a device, for there are many different types whose functions create different effects upon the passive partner, therefore, you must be precise on what your functions requirements are first before buying.

Likewise for me the selection of components is many, and I must select those whose functions are beneficial to the overall function of the I-G-V.

The cross over point where static power overtakes dynamic power is at the 65 nm process node to my understanding.

96: ***STATIC POWER CHALLENGES:***

To my understanding that there is a well known rule of semiconductor physics is when transistor length decreases, leakage current increases.

I agree that appears to make sense to my mind, sure agrees with the law of the squares.

Smaller physical distances make a current more prone to leakage, which I can appreciate, the problem that is involved.

As I see it, both source-to-drain leakage and gate leakage are inversely proportional to channel length and gate oxide thickness, respectively, and show dramatic increases in leakage.

And that is precisely what the law of the squares state; therefore, I have no problem with accepting that claim.

97: ***SOURCE-TO-DRAIN LEAKAGE:***

Also known as sub threshold ( $I_{SUB}$ ), Source-to-drain leakage is the dominant form of leakage, by my understanding, even when the transistor gate is off, seeing diagram on the next page.

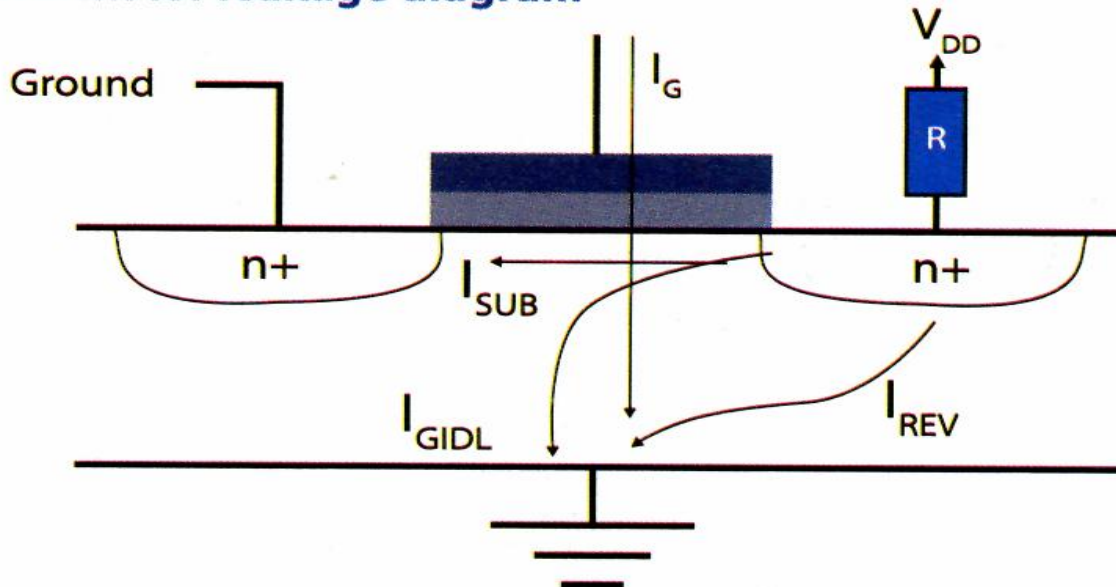
As transistors are reduced in size, it becomes increasingly difficult to prevent the current from flowing; therefore smaller 65 nm transistors will exhibit more source-to-drain leakage than larger transistors, providing all other parameters are equal.

Source-to-drain leakage also increases exponentially with increasing temperature (eg. Changing



Junction temperature from 25<sup>0</sup> to 85<sup>0</sup>C increases source-to-drain leakage by a factor of 5x, which the law of the squares suggests.

## Transistor leakage diagram



98: Another manufacturing challenge is the thickness of the gate oxide.

Thinner oxide allows the transistor to be switched on and off faster,

But increases the leakage.

The leakage is also influenced by the threshold voltage of the transistor; the voltage at which the channel conducts current between the gate and the source.

Small high speed transistors require a lower threshold voltage, which is influenced by oxide thickness and doping.

Maintaining the speed at which the transistor can be turned on and off via gate control increases the leakage as the transistor channel cannot be turned off completely.

99: ***GATE LEAKAGE:***

Although not as dominant as sub threshold leakage, gate leakage remains a very important consideration as it flows from gate to substrate.

A thinner gate oxide layer at 65 nm increases the gate leakage, but it only increases marginally with increase temperature.

100: ***DYNAMIC POWER CHALLENGES:***

Dynamic power is the additional power consumed by signals toggling and capacitive loads charging and discharging in a device.

The following equation shows the main variables affecting dynamic power:

- 1: *Capacitance charging:*
- 2: *Supply voltage:*
- 3: *Clock frequency.*

$$P_{dynamic} = \left[ \frac{1}{2} CV^2 + Q_{ShortCircuit} V \right] f \cdot activity$$

Short Circuit Charge during Switching

Dynamic power decreases as result of process shrinks that reduce capacitance and voltage in accordance with Moore's Law. So you cannot blame me for that law.

The challenge is implementing more circuits with each process shrink while increasing the maximum clock frequency.

As the capacity of FPGAs continues to double and the maximum clock frequency steadily increases, the power reduction declines for an equivalent circuit from process node to process node.

#### 101: **POWER REDUCTION STRATEGIES:**

I appreciate that without adequate static and dynamic power reduction strategies, FPGA power consumption can easily reach a point that mitigates any advantages obtained by moving to smaller process nodes.

To date there are several strategies for tackling these challenges:

##### 1: **LOW POWER PROCESS TECHNOLOGY:**

Most To my knowledge; most semiconductor foundries offer a specific technology optimised for low power applications (eg. TSMC's 65 nm low power (LP) technology) targeted at application in the portable and consumer market.

This process has been fine tuned for performance and leakage through the use of multiple threshold voltages, multiple I/O voltage transistors, and variable gate length transistors.

Low power devices use a thicker gate oxide than general purpose (G) devices to decrease standby leakage exponentially while only trading off some performance.

Also used is a tightly integrated process and design technology method that provides low power libraries, Intellectual property, and a design reference flow.

## 2: ***SILICON PROCESS OPTIMISATION:***

The semiconductor industry is to my understanding; constantly battling the evolving challenges of small process dimensions through huge investments in:

- 1: ***Equipment,***
- 2: ***Process Technologies.***
- 3: ***Design tools.***
- 4: ***Circuit Techniques.***

Which is precisely what we have and are still doing in Thailand, and will have to do the same in Israel and Italy and in fact any other part of the world that wish to manufacture the Searl Effect Technology.

Increased power consumption due to the transistor leakage that occurs at smaller process geometries is an industry wide challenge.

As I understand it; that a large number of widely used technologies at the 65 nm process node and at previous nodes are being used to maintain or increase performance while managing power consumption due to transistor leakage.

### ***COPPER ROUTING:***

By using an all copper Cu 29 metallisation, which replaced Aluminium Al 13, for on-chip routing provides reduced electrical and power resistance and thereby increases performance.

### ***LOW-K DIELECTRIC:***

A dielectric provides isolation between metal layers, enabling multiple routing layers.

Moving to a low-k dielectric reduces the inter-routing layer capacitance, which I understand significantly increases performance and reduces power.

### ***MULTI-THRESHOLD TRANSISTORS:***

The voltage threshold of a transistor affects the performance and leakage power of the transistor.

Using low threshold voltages that produce high-speed transistors where performance is required and high threshold voltages that produce slower low leakage transistors where performance is not required may not provide the optimal solution.

Using multi-threshold transistors provides a cost effective balance of performance vs. power consumption, when using high-performance transistors (low threshold) only where necessary, and using low power transistors (high threshold) everywhere else.

### ***VARIABLE GATE-LENGTH:***

The gate length of a transistor affects its speed and sub threshold leakage.

Using longer gate lengths reduces leakage current in circuits where performance is not required,

Where performance is critical, using short gate lengths maximises performance.

3: ***POWER ANALYSIS AND OPTIMISATION TECHNOLOGY:***

Tools that automatically select the required performance for each piece of logic as well as minimising power through power-aware placement, routing, and clocking are highly advantageous.

Software automatic power optimisation should be transparent to the designer but provide optimal use of architecture details to minimise power.

The goal of this feature is to reduce power without user intervention while having minimal impact on design performance.

***THE POWER / PERFORMANCE ADVANTAGE:***

By using a combination of power management methods, from process innovations to design software power optimisation, designers can obtain maximum benefits of the 65 nm process and get the performance they need with the lowest possible power consumption.

102: This article has not been presented as a document as it is just a one off discussion of just 0.005 of a grain of sand in the whole of the Searl International Space Research Consortium objectives.

Nevertheless it has been released upon the authority of:



***Prof. John Roy Robert Searl head of R&D.  
Tomorrow's energy and transportation systems.***

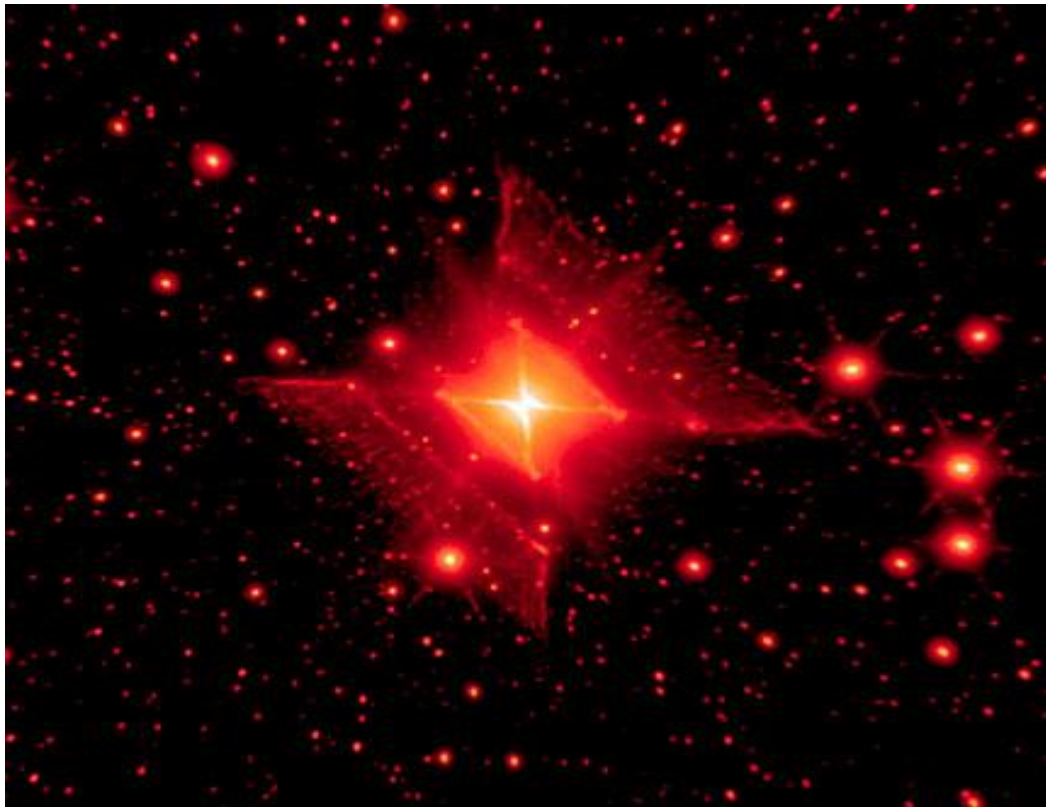
103: Designing a space vehicle for real deep space work needs much knowledge across the whole spectrum of life, and that is not joking – its reality.

The Law of the Squares state that in all nature there are always 2 primary states and they are opposite to each other.

Does this actually hold true with our universe?

- 1: There is light matter.***
- 2: There is dark matter.***

And from somewhere; some kind person sent me this photo of black matter - I cannot confirm it's absolutely true, but if it is then it support the law of the squares as being correct. I hope that it's true.



It is amazing what the Homo sapiens can achieve.

104:

*DOC-SISRC-MFD-PM-1.*  
*DATE: 18<sup>th</sup> July 1968.*  
*EDITION: First.*



*Searl International Space Research Consortium.*

**LOCATION** : Headquarters – Mortimer – Reading – Berkshire – England.  
**DIVISION** : *Manned Flight.*  
**SUBJECT** : *Plastics materials.*  
**PART** : **One**  
**AUTHOR** : **John Roy Robert Searl.**

105: As you know by now a molecule product is employed in the manufacture of the Searl Effect Generator (S-E-G); which has been termed as a gate control of the generator.

As stated earlier that it can be any class of plastic, so this document is to show what I knew back there in time so long ago; and I appreciate that new materials have been developed along my time period of life, which due to lack of hard cash have not been able to keep up to date with the

progress which has been achieved over the years, with in this domain. Where I have been lucky to get information upon new materials since the original date of this document; these will be automatically included in this release.

106: ***PARKESINE AND CELLULOID:***

To my knowledge, while Hancock and Goodyear were developing the basic processes of rubber technology, other important discoveries were taking place in Europe.

Remember every person listed in this book played a part in the development of the Searl Effect Technology without them such technology could not exist.

Following earlier work by Pelouze, Schönbein was able to establish conditions for controlled nitration of cellulose.

The product soon became of interest as an explosive and in the manufacture of collodion, a solution in an alcohol – ether mixture.

To my understanding, that in 1850s the English inventor Alexander Parks ‘*observed after much research, labour and investigation that the solid residue left on the evaporation of the solvent of photographic collodion produced a hard horny elastic and waterproof substance*’.

Then in 1856 he patented the process of waterproofing woven fabrics by the use of such solutions.

107: As I recall it; that in 1862 the Great International Exhibition was held in London, which unfortunate I was not able to attend that event; but I do understand that it was visited by six million people, which is hard to believe, but that was true.

I am lead to believe that at this exhibition a bronze medal was awarded to Parkes for his exhibit Parkesine.

This was obtained by first preparing a suitable cellulose nitrate and dissolving it in a minimum of solvent.

The mixture was then put on a heated roller machine, from which some of the solvent was then removed.

As I understand it, that while still in the plastic state the material was then shaped by ‘*dies or pressure*’.

Then in 1866 the Parkesine Co. Ltd was formed but to my knowledge it failed in 1868 ***WHY?***

This appears in part due to the fact that in trying to reduce production costs products inferior to those exhibited in 1862 were being sold to the public.

You think that is crap – you are wrong; even in my working period in industrial, I witness Roll Royce did the same on car door hinges. Yes there are other companies that I can name from experience who done the same thing and it will still go on today; and the reason for this is the fact that the unions have made wages far too high; thus overheads have gone up: which is no different to that of cancer which grows with time until the company dies from its growth; which has already shut down many companies and many more will join them soon.



Although the Parkesine Company suffered an economic failure, credit must go to Parkes as the first man to attempt the commercial exploitation of a chemically modified polymer as a thermoplastics material.

Just one year after the failure of the Parkesine Company a collaborator of Parkes, by the name of Daniel Spill, formed the Xylonite Company to process materials similar to Parkesine.

Once again economic failure resulted and the Company was wound up in December 1874.

Undaunted, Spill moved to a new site, established the Daniel Spill Company and working in a modest way continues production of Xylonite and Ivoride.

- 108: I have selected Daniel as an example of myself, one who refused to give up no matter how hopeless it appears to be. There are many more just like me, so I am not alone. And throughout time others will be born who will be the same like me; never stopping from wanting to know the truth and to apply that knowledge gain to improve this planet for all creatures great and small.
- 109: I am aware that in America developments were also taking place in the use of cellulose nitrate.

In 1865 John Wesley Hyatt who, like Parkes and Spill, had no formal scientific training, but possessed that all important requirement of a plastics technologist – inventive ingenuity – became engrossed in devising a method for producing billiard balls from materials other than ivory.

Originally using mixtures of cloth, ivory dust and shellac, and in 1869 he patented the use of collodion for coating billiard balls.

The inflammability of collodion was quickly recognised.

In the history of plastics, Kaufman tells how Hyatt received a letter from a Colorado billiard saloon proprietor commenting that occasionally the violent contact of the balls would produce a mild explosion like a percussion gun cap.

This in itself he did not mind but each time this happened “*instantly every man in the room pulled a gun*”. Which is a reflex reaction function of the Homo sapiens brain of people who carries guns around.

- 110: Products made up to this time both in England and the United States suffered from the high shrinkage due to the evaporation of the solvent.

Then in 1870 J. W. Hyatt and his brother took out US Patent 105338 for a process of producing a horn-like material using cellulose nitrate and camphor.

I accept that Parkes and Spill had mentioned camphor in their work it was left to the Hyatt brothers to appreciate the unique value of camphor as a plasticiser for cellulose nitrate.

Then in 1872 the term celluliod was first used to describe the product, which quickly became a commercial success.

The validity of Hyatt's patents was challenged by Spill and a number of court actions took place between 1877 and 1884.

In the final action it was found that Spill had no claim on the Hyatt brothers, the judge opining

that the true inventor of the process was in fact Alexander Parkes since he had mentioned the use of both camphor and alcohol in his patents.

There was thus no restriction on the use of these processes and any company, including the Hyatts Celluloid Manufacturing Company, were free to use them.

As a result of this decision the Celluloid Manufacturing Company prospered, as always in such cases, changed its name to the American Celluloid and Chemical Corporation and eventually became absorbed by the Celanese Corporation.

I hope my new team can appreciate what I am stating here, don't show or tell people how that magnetiser works – otherwise others will make them and you will be on the dole system.

On closing this section of this document; it is interesting to note that during this period L. P. Merriam and Spill collaborated in their work, and this led to the formation in 1877 of the British Xylonite Company.

Although absorbed by the Distillers organisation in 1961, and subsequently subjected to further industrial take-overs, this company remains an important force in the British plastics industry.

110: This document has been released to the general public by the authority of:



*Prof. John Roy Robert Searl head of R&D.  
Tomorrow's energy and transportation systems.*

111: Since I return to take control of this technology Europe has issued a number of rules which have to conform to in across Europe, which have, and will continue to shut down companies.

I have to be certain that all my work meet these new laws or better them, which in one case here I discover that their safety laws failed to do just that; so I do not trust them.

Therefore I shall set my laws of operational requirements to certify safety at all times regardless of these fools of Europe demands. One of their rules almost cost me my life. Agree the manufacture had passed the product safe in accordance with Europe demands – unknown to them; one of the units purchased had actually in reality failed to be safe.

Due to my hands on experience over time, I removed each plug to identify which unit was faulty, and removing it and took it apart found that the problem was the DPDT switch whose positive side was struck in the on position, this made all 10 outputs live when switched off yet no LED warning of this fact was indicated, as far as all LED indication was that all units were dead; where in reality the whole 50 power lines were very much active, to my personal body experience results confirmed. The company replace the unit, they admitted that they were not aware of such a problem in the rules of testing, but would indeed now check for this condition in future. The problem was that I trusted Europe brass that they knew what they were doing – clearly they don't.

112:

*DOC-SISRC-MED-D-MFD-2  
PART: ONE.  
EDITION: First.*



*Searl International Space Research Consortium UK.  
London – England.*

*Location : Grahame Park Estate – London – Headquarters.  
Department : Medical.  
Subject : Compulsive Behaviour..  
Section : Manned Flight Division.  
Author : Prof. John Roy Robert Searl.  
Date : May 27<sup>th</sup> 2000.*

113: In this section instead of continuing with the drugs which I have to take to keep going, I will discuss a serious problem of the Homo sapiens called Compulsive disorder.



114: Compulsive behaviour takes different levels in different people:

- 1: From a low level that harms no other person, or themselves.
- 2: From a medium level that harms no one except themselves.
- 3: From a high level that do harm others, but not themselves directly but indirectly.

Those whose pictures are shown above fall into the category of level 3.

115: Let me give my understanding upon category 1, the low level of compulsive behaviour.

### ***WHAT IS COMPULSIVE BEHAVIOUR?***

Compulsive behaviour consists of actions which are carried out for apparently irrational reasons or for personal gain based upon irrational acts of greed.

At the low level for example:

Repeatedly washing one's hands or having to touch things like the penis, vagina or anus in a particular manner a certain number of times; and then to do it all over again if an action is not performed perfectly the time before; are to my mind indications that there is a problem

It appears to my mind that attempts to prevent or avoid the compulsive 'ritual' often results in considerable anxiety or worry that something awful may happen if the act is not actually performed; that is my observation impression upon what I have witnessed.

Minor '*compulsions*' such as re-checking one's work or making doubly sure that the door is locked can be useful, since we all make mistakes.

However, if the checking or repetition becomes excessive, it can be a serious handicap that may interfere with the sufferer's ability to live a normal life, or to work efficiently.

Compulsive behaviour may also be accompanied by unwanted or unpleasant thoughts.

Obsessional ideas may force themselves into the sufferer's mind despite all manner of attempts to keep them out.

Before some of you start shouting that's unfair statement; let me state that I do appreciate the fact that one in ten of you are generally sufferer's from a physical problem which requires medial treatment, such as piles, worms, water bug, bacteria and virus problems, though it forces you to react in a manner of a compulsive behaviour.

I do know what the feeling is like from actual experience of a water bug problem also piles problem, and I am not joking either. Though I appear to have overcome the pile problem by an unorthodox method which I used, the water bug problem required the use of medication.

Unfortunate I have spent 12 hours searching for just one photo of myself in Australia suffering from a water bug attack – I have given up now searching for it; maybe later on I might resume the search for it, if I do find it, I will add it to this part later.

116: ***SYMPTONS:***

***1: A strong need or compulsion to carry out purposes or senseless actions, usually repeatedly.***

***2: Unwelcome, unpleasant, or upsetting thought that prey on the mind, or urges to carry out undesirable actions, like stealing an old mans property.***

***3: Difficulty in carrying out normal responsibilities like being honest and truthful due to the repetition of unnecessary or irrational acts***

117: ***WHAT CAUSES COMPULSIVE BEHAVIOUR?***

To my accepted knowledge there appear that there is no single cause of compulsive behaviour or obsessional thoughts.

Inheritance may play a part in the condition, but not to any great extent.

Childhood experiences have been considered as a factor; but again, the evidence is not clear-cut.

And I agree that from actual experience I have witness a mother brainwashing 6 young children to steal from their father; while he was asleep or away at work, and that is a FACT!

There is no doubt; that is one way a child becomes a compulsive burglar. Peter stealing tools etc from his place of employment and from the benefits groups helped him to obtain the skill to steal from this place £350,000 plus of equipment containing my pension money and licence money, without any legal problems. He span the solicitor around his knob like a spinning top

Who gladly gave them the rights to put me into hospital then stole my personal equipment in the effort to steal the technology and stop my work – that is a FACT!

Those shown in the block above, except the fifth person: were involved in the robbery one is still not known, as there are a number of suspects.

In some cases, depression is sometimes associated with compulsive behaviour, and psychological or stressful events may also be relevant.

That was not the case is this robbery, it was greed; they were going to own the Searl Technology at any cost regardless of their action results. Others have also done the same in the past under exactly the same thinking to steal and own it.

They acutely believe that they would control the world, that they would have the power to do so, to become the richest company in the world. Fools or imbeciles, the choice of phase are yours.

What is common to most compulsions is the anxiety and upset experienced by the sufferer, who may feel ashamed or weak for having such thoughts or urges in the first place.

Don't you believe that; in this case of robbery, it made them strong and certainly not ashamed of their aims; knowing that their plan action would stop me and they would own it, yes I agree that Peter the mastermind of the robbery was suffering from self imposed anxiety; that I had just signed the technology over to the Germans; where in reality only a draft proposal was presented to the Germans to consider partnership in the development of the technology.

Peter had been brainwash that if he stole the technology he would get a big house of his choice, Top computers, oscilloscopes etc, car of his choice, all bills paid rent free in the offer. That was how easy it was to brainwash him with nothing more than crap.

118: ***HOW IS COMPULSIVE BEHAVIOUR DIAGNOSED AND TREATED?***

Well in the case of this criminal act they should be taken to a public square, stripped and strapped to a post and administrate 25 strokes of the birch upon their bare buttocks and televised around the world that their action will not be tolerated.

THIS MEDICATION SHOULD CONTINUE EACH DAY UNTIL THE TOTAL STOLEN GOODS HAD BEEN RETURNED IN PERFECT ORDER.

Follow by 20 years of real hard labour, before being released. That would certainly cure their compulsive behaviour, and I would be proud to undertake the administration of the medication free at no charge to the public. So that may happen to become reality before I die.

In other situations a detailed history, put together from questions asked by the doctor, will usually uncover the unwanted thoughts or actions that are causing misery to the sufferer.

I do accept the fact that sufferers are often depressed as a reaction to their compulsive symptoms.

They may also report temporary relief from anxiety after performing their unwanted actions or rituals, although in some cases the anxiety may be increased, which I can understand.

The treatment of compulsive or obsessional behaviour depends on the nature and severity of the disorder.

This may include simple reassurance that the sufferer is not going mad, or is a bad person because of a compulsion that is proving distressing.

Psychotherapy either on an individual or group basis, preferably of a supportive and practical type rather than of an intensive or probing nature.

I accept that in some cases drug treatment may offer temporary relief, particularly where depression is also present.

Behaviour therapy: which is designed to alter or change the pattern of compulsive behaviour and gradually reduce the level of associated anxiety.

119: ***HOW CAN I AVOID COMPULSIVE BEHAVIOUR AND UNWANTED THOUGHTS?***

*(A) Try to live as balanced a life as possible:*

*(B) Avoid circumstances which causes unnecessary or serious stress:*

*(C) If you are worried, seek help sooner rather than later from qualified medical or psychological practitioners.*

120: ***WHAT CAN I DO MYSELF?***

Compulsive behaviour and unwanted thoughts or urges are not easy to control, that issue I accept.

Avoidance of stress or of situations which provoke anxiety may reduce the occurrence of compulsions.

Engaging in absorbing or enjoyable pastimes, may also help.

Keeping busy like me you have no time for compulsive behaviour, both mentally and physically, is certainly worth while.

121: ***WHEN SHOULD I SEE MY DOCTOR?***

My advice is seeking medical help if the compulsion or obsession is causing more than a moderate amount of concern, or if its frequency is increasing.

Such problems can prove difficult to treat, especially if they have existed for a long time and have become ingrained.

That is why I recommend the public birching for those five burglars; as their compulsive obsession is well and truly ingrained and needs serve medication to trash it of them; clearly their criminal behaviour does not cause them any concern at all because the law supports them and protects them



122: ***WHAT WILL THE DOCTOR DO?***

The doctor will decide if the problem is serious or not, and then instigate a programme of treatment which may range from a simple chat, to a referral to an appropriate specialist.

Admitting that such a problem exists: which many people are ashamed or reluctant to do; is an important first step towards recovery

123: ***THE COURSE OF COMPULSIVE DISORDERS:***

To my accepted knowledge, a good many cases improve, although this can take up to a year.

Long term compulsive disorder may vary in their intensity, even though there can be periods of partial or even complete reduction of symptoms.

124: ***IS COMPULSIVE BEHAVIOUR DANGEROUS?***

To my understanding, despite the disruption of daily routines and interference with the enjoyment of life, there is normally very little chance of compulsive disorders causing any actual danger to the sufferer.

That is indeed true, they put me into hospital first; before they robbed me, so I was out of the way, thus making certain they never got hurt in the robbery process. If that hospital had released me on the Saturday as I requested they would not been able to rob me without suffering badly in the process – that is a fact and they knew that – that is why they drug my drink so I would be out of the way for their evil action to take place without any problems.

Otherwise the main danger is the threat to one's peace of mind and the distress associated with such problems, but for those robbers it will not be their minds but their arses that will be in danger of pain. That I can promise them.

125: I am sorry to say that this part of the report has been brief, but hopefully enough details to present a reasonable picture of the problem as other issues need to be tackled here.

126: ***MEDICAL UPDATES:***

***Today, Wednesday 23<sup>rd</sup> January 2,008.***

Achieving productivity by maximising efficiency; and resource utilisation to deliver improved patient outcomes that with in Searl International Space Research Consortium organisation and its deep space mission operations.

At this time it's in a resource-constrained program so now is the time to do things smarter.

With pressure on for me to meet a solution to deliver a better value for money and optimise patient outcomes, driving efficiency and achieving productivity are now critical issues for me to undertake.

To meet these challenges it is vital for me to focus on operational efficiency on the Inverse-Gravity-Vehicle (I-G-V) and thinking smarter about the way processes and procedures are carried out.



For deep space missions pathways need to be redesigned to reduce waste and variance, and essential workforce time must be freed-up for direct patient care by ensuring that the right people are in the right place, at the right time, which is vital in deep space missions.

It is not a simple task as I have to consider many points for a mission that is 100% perfect from the health point of the mission, such as:

- 1: Applying a business minded approach to theatre productivity in a deep space operation.
- 2: Applying lean methodology to theatre management to minimise waste and delays.
- 3: Delivering more for less by doing the right things better.
- 4: Applying lean tools and principles in the sick bay on board of the I-G-V's to maximise productivity and minimise waste.

There are many other points' needs to be careful in selection and within the operation of the Mission: some of which will commence in this part of the book.

127: This document has been released by the authority of:



***Prof. John Roy Robert Searl: Head of Research and Development.  
Human Studies – author – lecturer.***

128:

***DOC-SISRC-MED-D-MFD-2  
PART: ONE.  
EDITION: First.***



***Searl International Space Research Consortium UK.  
London – England.***

***Location : Grahame Park Estate – London – Headquarters.  
Department : Medical.  
Subject : Medical Electrics.  
Section : Manned Flight Division.  
Author : Prof. John Roy Robert Searl.  
Date : May 2<sup>nd</sup> 2000.***

129: The Law of the Squares states that there are always two prime states and they are opposite to each other in this universe.

How true that law is;

- 1: *There is the domain of reality:*
- 2: *There is the domain of fantasy.*

For a commercial space business, there are no other choices except the domain of reality: which is a must – no room for fantasy, as I witness all the time around me.

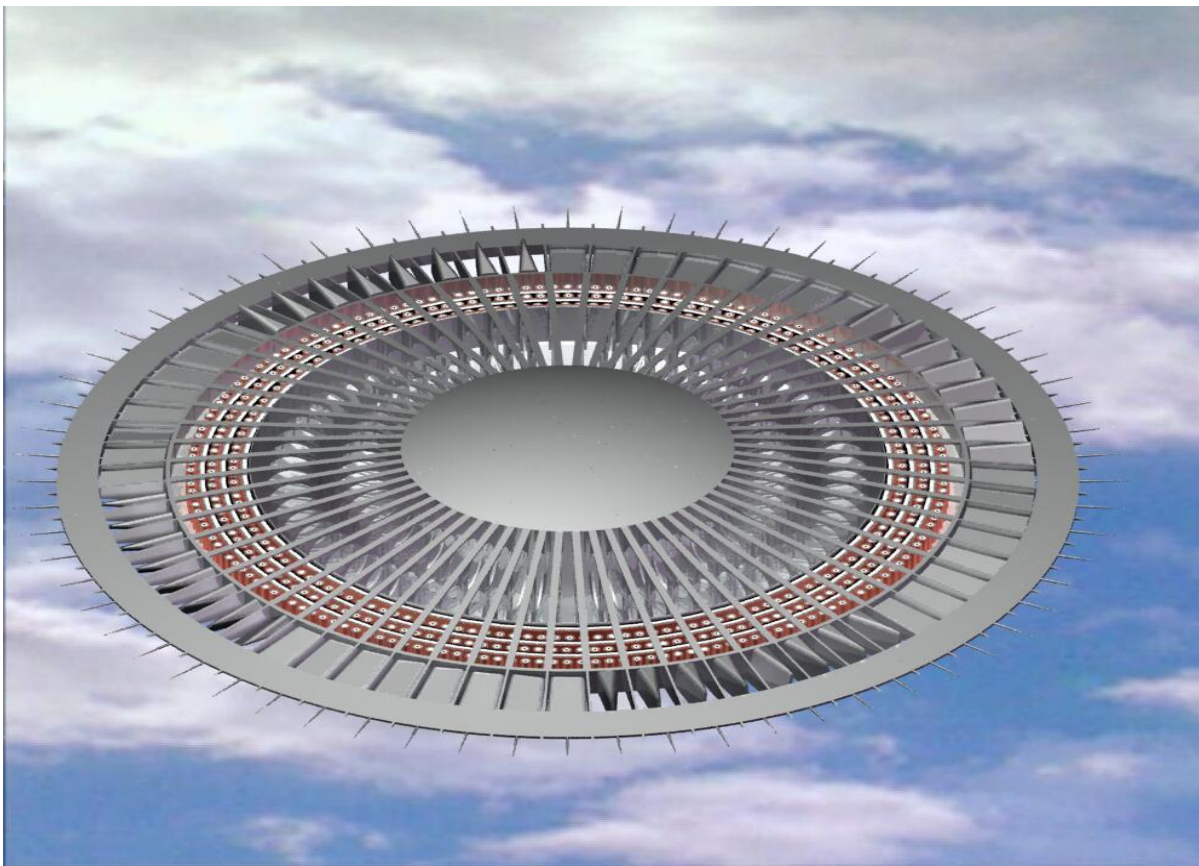
I do not see Homo sapiens; just walking cloths of fantasy – clearly brainwashed to conform to someone's ideas – unacceptable in the domain of space operations.

It's easier to design a structure for a house, ship or conventional aircraft then a deep space mission craft.

130: Agree that I am not in favour of rocket technology for commercial space business, due to its cost of operations and the risks and the insurance that is involved; to my mind, are far too high. Which no doubt you already understand my feelings.

To those problems: I am studying and researching a solution which does not contain either that high risk factor or anything equal to that cost of operation factor.

And it's insanity to say that unless you can come up with an alterative solution; to which I feel I can:



***INVERSE-GAVITY-VEHICLE (I-G-V) CONCEPT.***



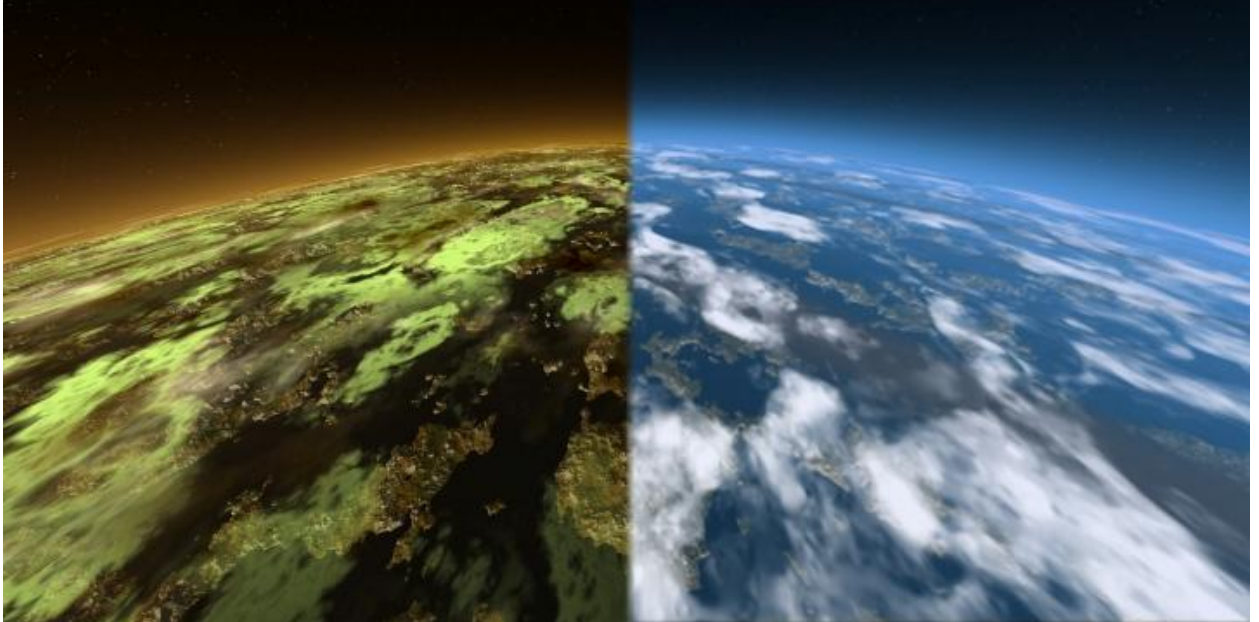




*The future that is meant to be – given time so shall it be – first the thought, then the dream from these we manifest the future of flight by the I-G-V- the cleaner and safer way of flight. The future is yours so make it happen!*

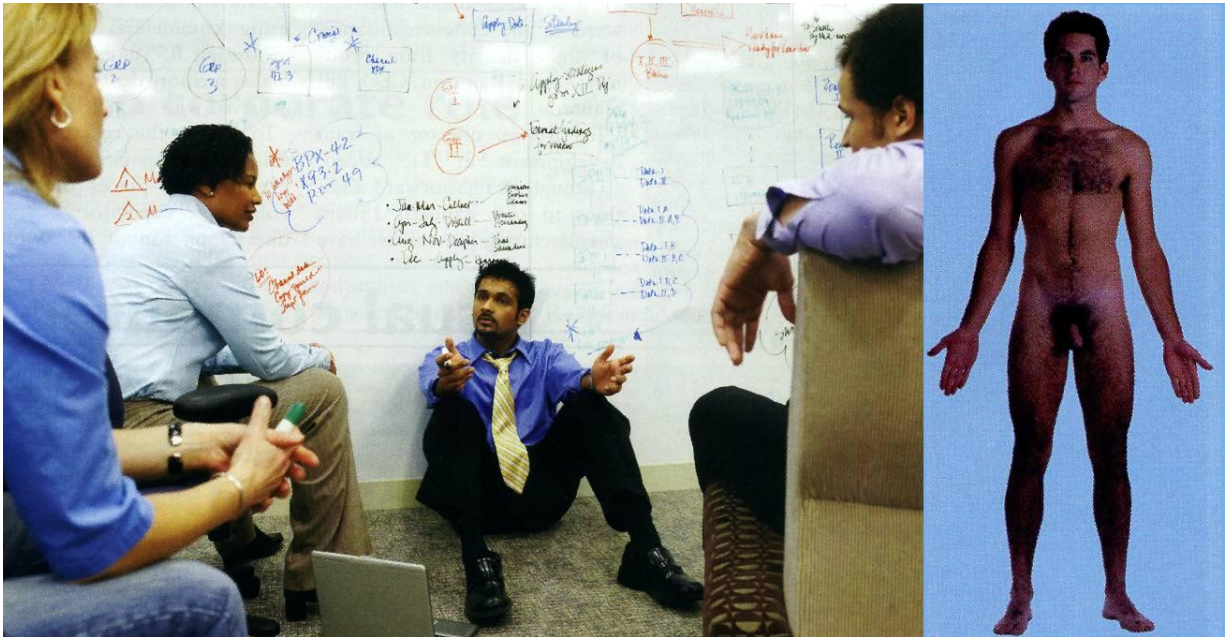
## The man who saved tomorrow.....

John R.R. Searl



*One man cannot save the world – it takes masses over time to bugger it up- and it will take the power of the masses to un-bugger it.*

For the above dream can become reality – first we have to live and accept reality – so what is reality?



*Domain of fantasy: where cloths actually walk about instead of you. Domain of reality*

132: For space operation the domain of reality is vital, otherwise such programs will fail.

This structure termed by arbitration as a Homo sapiens, commonly term a man and its opposite prime state has been termed a woman all by arbitration – not by me – but accepted by me.

Now, it is a fact that within the domain of reality these two prime states are the greatest problem in a space mission requirements, and I am not alone upon that issue, so is NASA and Russia and every other country who are attempting to get into the space domain business.

Just popping into space and back is not much of a problem, but going to the Moon or Mars to explore its past is quite a different kettle of fish, and the deeper you go into space greater are the problems. This is based upon the number of Homo sapiens that are employed upon that mission.

Again the problem increases with mix staff gender; why use a mix gender crew if that increases problems?

One has to balance the needs of deep space penetration missions; the two brains function different, and this fact is vital for success on long term missions, which are months or years long.

I have no choice but to accept the domain of reality for success of any space mission which is operating on the I-G-V concept.

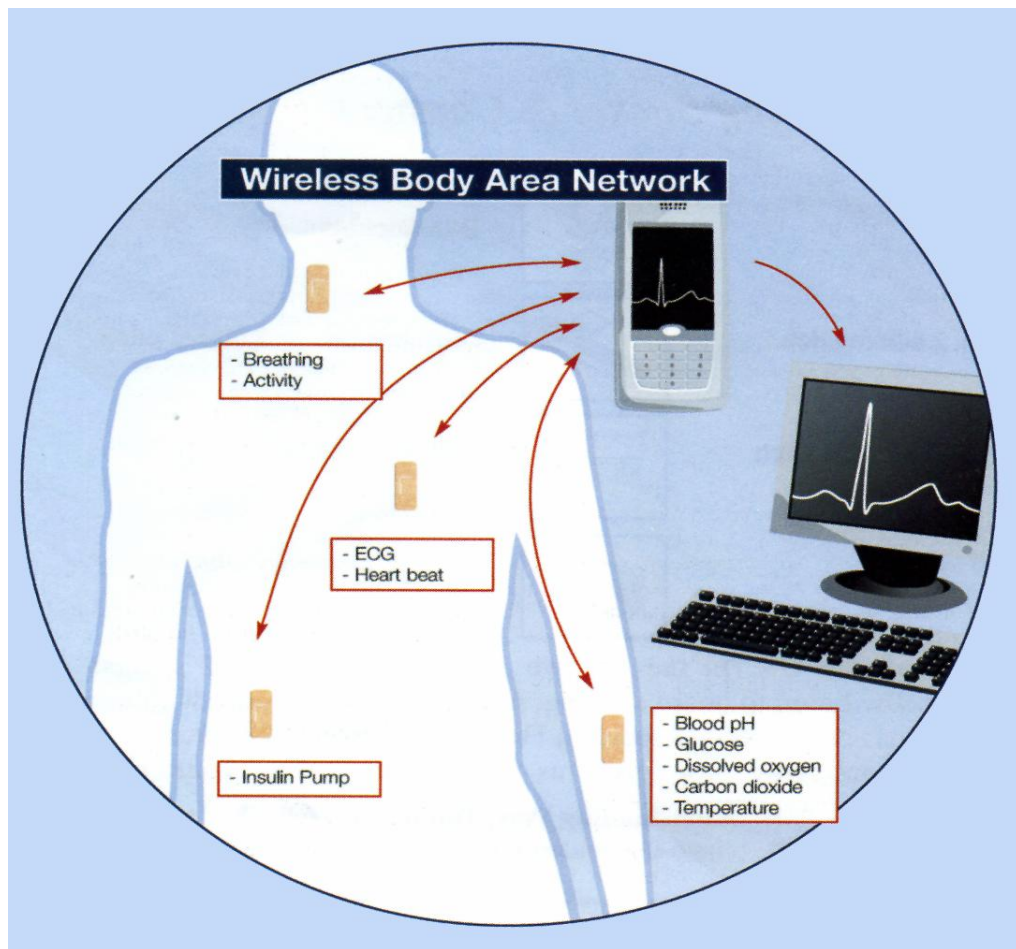
The key to success strangely relies on a good sick bay function system that will meet absolutely all needs of any unsuspected problems like broken bones, or disease or due to ageing process.

All available equipment to assist the medical staff on mission is a must, so let me take a look at what I know and understand that is the vital issue '**UNDERSTAND**'

Space mission is indeed a brave new world, and for me I have been lucky to experience first hand



Both as an employee on the wards, and the lab, and also as the patient, so I speak from first hand experience.



*This is indeed my world of reality – and if space as a business is to be, then we have no choice but to accept the reality. You have already witness my heart and the first operation done on it, unfortunate one of the operation DVD opens the other two don't open and unfortunate I have no idea how I can place that one which opens into this part of the book, so you can see the truth of what I state.*

All these measurements are vital upon long term missions, which I accept as to the reality of successful missions.

We have to accept the reality that people are living longer and are surviving previously life-threatening illnesses and this is due in no small part to advances in medical science, to that fact I accept.

New medical technologies can bring benefits to patients, carers and clinicians alike and can improve the quality of life for patients through more effective and efficient treatments.

As a result the populations in Western Europe, the US and Japan are ageing and estimates suggest that by 2025 the number of people in these countries over the age of 65 will exceed 200 million. At this time that counts me in as one of them now, but by then I will not be around and by that time long forgotten; also like so many others will be. Out of millions dead only a very few are still remember and only by a few of the living, sadly to state. I do appreciate that they have gone and we must carry on living, as part of them.

In reality, poor diet and an increasingly sedentary lifestyle are other problems that need to be addressed leading, as they have, to an increase in patients with chronic, long term conditions. I can understand why you think this could not happen to flight crews on deep space missions; for there is nothing within the laws of nature that suggest that it cannot happen.

- 133: As a result there will be an increase in the range of medical services that will be required to manage these conditions and to support independent living; is that independent living really the correct way of thinking for the caring of the age. In my mind creating villages for group living so that the age will always be associating with others of their kind; thereby each assist others to obtain a better life style, then otherwise they could obtain.

It is from my observation here upon planet Earth that I base my structure concept for the flight crew and flight staff on any deep space mission regardless where and how long the planned mission is designed for.

I do appreciate that new medical technologies will be available by the time Star Ship Explorer is ready to take her maiden voyage to planet Mars, and such technologies will be installed in its sick bay, not only there but at all sick bays in house on Swallow Command bases to enable the elderly staff, or disabled, people to be cared for in their homes as well as in hospitals or residential care homes.

I also appreciate a fact that while new medical technologies can bring many benefits: enabling patients to stay in their own homes, and on flight stay at their post of operations, by making remote diagnosis and treatment possible, reduce treatment times and enable doctors to treat patients more effectively, there are limits which I appreciate to the use of this technology.

It is expensive, especially if it is not implemented effectively or correctly.

- 134: I do understand the growing patient demand for personalised treatments are leading to huge pressure costs on healthcare service providers and installing technology outside hospitals can also prove problematic.

I accept as fact, that patients may find it difficult to use the technology and may find it disturbing in that they appear to have less direct contact with practitioners.

That kind of response I can well understand, but what we must understand is that those who fly the Inverse-Gravity-Vehicles will be educated members who actually live in the domain of reality, and will accept the reality of the needs for the latest's medical technology that will be available at that time period: to be in house on flight missions.

I also accept the fact that healthcare providers are also ill-equipped to cope with the trend towards more pervasive monitoring of patients that will be necessary to manage long term conditions that is no different to that which will be planned for deep space mission of long periods on duty away from planet Earth. At this time health services here have mainly been designed to cope with managing acute illness.

- 135: **Note:** Who can possibly predict that a five to twenty five year mission in deep space would not produce any serious illness on mission program, as to certify each crew and flight member absolute clear of all dangerous diseases before embarking on that mission; to my mind that is in question, just say we are able to achieve that status here on Earth; could any member of such flight would not become ill from working on that planet surface: that possibility is 50-50 because at this stage we do not yet know all the facts involved at the target reference point.



Some day in the future we shall know the facts; until then we can only assume, unfortunate it is so often the case that our assumptions are incorrect.

136: ***NETWORKED SENSOR APPLICATION:***

To my accepted understanding; based entirely according to research from Parks Associates by 2012 over 3.5 million senior citizens in the US alone will be using networked sensor applications in their homes to both monitor and improve their health.

Upon that statement I based as fact such system could be used throughout the sections of the I-G-V for precisely the same reason, better health control.

I have a duty to all staff that everything will be done to protect them and their well being and that play an important factor in any mission success.

In their recent report '*Senor Technology for Home health Application*' they anticipate innovation in sensor technologies that will make it easier to manufacture lighter, smarter and more reliable devices that will enable the growing adoption of home-based medical applications.

Based upon public claims that the UK is a world leader and centre of excellence of new medical technologies, and if this is true, then it's about the only technology that remains British, most others have gone from the UK.

Yet, while comprising of nearly 5,000 companies with a combined turnover in excess of £4 billion a year, the UK is an international laggard in terms of the implementation of innovative medical products. This claim I can truly understand that the cost of the health service has ran wild as I have predicted it would over the years; and there is not the funds available to meet such cost which is involved.

Of course such manufacturers will make excuses that the problem lies, to some extent, with the structure of the NHS itself. The medical market in the UK is complicated, to that I must agree is true, but do not forget that the whole of the UK health service cost has jumped, and lot less people are working to fund that cost. Manufactures greed does not help the NHS budget.

I understand that we have a centrally run and managed NHS which to my knowledge; that it comprises of 700 Trusts, which much of the decision making is devolved.

I can well understand the problems of hospitals; having spent some of my working life time in them; that hospitals will tend to make their own decisions about which IT systems or technologies they want to use, to my hands on experience that is not quite true, as their budget sets the choice of what can be afforded, and they have to make do with that result. If only manufacturers were not so greedy on profit making they might find that they get more sells without knocking the NHS to try to force them to buy that which they cannot afford to buy.

From the manufacture point of view their angle on the NHS is that there are inconsistencies in applying and purchasing policies which can have a real impact on the development of new technology. I have to state here that my time of late in hospitals as a patient; I have indeed witness a massive change in hospitals; upon medical measuring equipment that is now in use, not only in the UK, but in Thailand also. Therefore, to my mind at least the manufacturers claims made here are out of order in reality, rather more in the domain of fantasy.

It is catch 22; what came first the egg or the hen – likewise what come's first goods or money?

I agree, quite a few firms trust me for payment, and will supply the goods, but then its only from a few pounds to £5,000 today, quite clearly much of such equipment cost far more then that, so its out of the question to be able to buy just like that based upon companies marketing sell pressure.

137: ***CHANGING DEMANDS:***

All things are on the change and this also applies to science and technology as well and the fact is that the majority of medical products have some kind of semiconductor in them and that content is rising rapidly as more and more new products come onto the market.

As to my understanding, the company termed Toumaz Technology is to my mind is an interesting example of a company that is looking to make the most of those changing demands.

My understanding is that Toumaz is a spin out company from Imperial College in London, which I know well, as I have spent time talking about this technology there a few years back, and I understand that it was the brainchild of Professor Chris Toumazou and Keith Errey (chairman and Chief Operating Officer respectively) it was founded to exploit the developments taking place at Imperial in terms of ultra-low power silicon chip technology. I am sorry to state that I do not know either of these men personal, nor really understand what their position was at that college, but I have never claimed to know everything, no one can.

That company to my knowledge focus on ultra low power techniques, combined with signal processing and wireless systems, led to the creation of the company's proprietary Advanced Mixed Signal (AMx) technology and it decided to focus on what it describes as the '*human space*' as it saw a host of product opportunities in terms of healthcare and lifestyle management. Which I have no problem in accepting that as fact, and accept the view such medical products will certainly be required for space exploration.

They did claim that they were ahead of the market when they started in 2000, but we are now seeing serious interest from medical manufacturers in our products.

Wireless is happening and people are using wireless devices in every day life, which are small, and unobtrusive wireless devices are widespread, that I have noticed; even if I am not at this present time using such devices.

They claim that using the company's AMx technology they have developed a new wireless sensor interface platform, which I understand is termed Sensium and is capable of delivering a new wave of lifestyle-compatible, personalised care applications.

It is claimed that it has the potential to meet and transform the treatment and management of chronic disease, and it's my duty to check and study such claims in the effort of selecting the best options for the Searl Technology program.

The Sensium TZ1030 is an ultra low power wireless sensor interface platform for a wide range of applications in healthcare, sports and lifestyle management.

My knowledge upon this device is that it has a RF transceiver, digital block with 8051 processor and a reconfigurable sensor interface. On chip programme and data memory will enable the local processing of signals.

The Sensium has to my understanding been designed to work with a range of body-worn physical and bio-chemical sensors and is capable of supporting a new generation of low-cost, disposable

Healthcare solutions.

Lets take an example the Sensium-T enabled digital plaster is no larger then a nicotine patch but is able to provide real-time, pro-active Healthcare monitoring and 24/7 diagnostic and intervention capability.

With appropriate external sensors Sensium could provide ultra low power monitoring of temperature, ECG, physical activity, blood glucose and oxygen levels.

I am aware that Parks Associates research expresses some reservations about this type of technology.

In addition to the technological challengers there is also the problem of winning over customers trust as well as the confidence of multiple industry sectors, regardless whether that is the NHS in the UK or insurance companies in the US.

This technology does involved adopting a difficult business model. No one to my knowledge has worked out how to pay for these new types of technologies.

I expect that in the US the process is fairly straightforward. The question is if there are cost benefits the insurance companies will move to adopt it – or in reality: would they?

Over there it is all about providing an additional service, so proving the technology at the clinical level will ultimately help the drive it out into the community so many would think – unfortunate my experience on the Searl Technology suggest that will not be the case, it will be a hard effort to get that ball to roll as there are already products on the market in actual use.

138: ***END-TO-END-MONITORING:***

The Sensium chip though is only one part of an end-to-end system. I understand that they are currently partnering with Oracle to demonstrate a complete end- to-end wireless monitoring system.

Clinicians need to be able to trust data and will want to be able to remotely interrogate devices.

Some GPS have proved very supportive of the technology. They want to be able to monitor patients over an extended period of time in order to make more effective diagnoses, which of cause I have personal been tested twice on a 24 hours monitoring portable system to obtain a better picture of my heart function based upon the medication that I was taking.

From my understanding Toumaz's work with Oracle is aiming to reduce cost, improve the quality of life of patients and enable better treatment outcome. That is a major requirement to my way of thinking for Searl International Space Research Consortium staff and especially its space missions.

Their aim is to develop an end-to-end monitoring system that can link real time information taken from the patient to an electronic record, using Oracle's information system, the Healthcare Transaction Base (HTB). This I feel is an urgent requirement for the Star Ship Explorer project.

HTB has been designed to create a comprehensive patient record which will enable information to be shared across institutions and across geographies that includes flight staff and crews of space missions.

To my mind: key data could be consolidated and care more efficiently provided which is badly needed as from my seat here it appears that healthcare around the world already overstretched and there is a growing consensus of opinion that the forecasted demands are going to be beyond the resources that are available.

Early diagnosis and prevention are just elements of a rapidly changing healthcare environment, from paperless and digitalized hospitals to vendors offering end-to-end solutions that not only provide diagnostic equipment but also data storage servers and software, the medical equipment market is changing dramatically; and I always knew that day would come where many changes would be made why I was still alive.

All these trends have one common goal; increase healthcare productivity which will mean more patients can be treated using faster diagnostic tools.

Fact or fiction or just hope over experience, only time will tell, if my thinking is within the domain of reality.

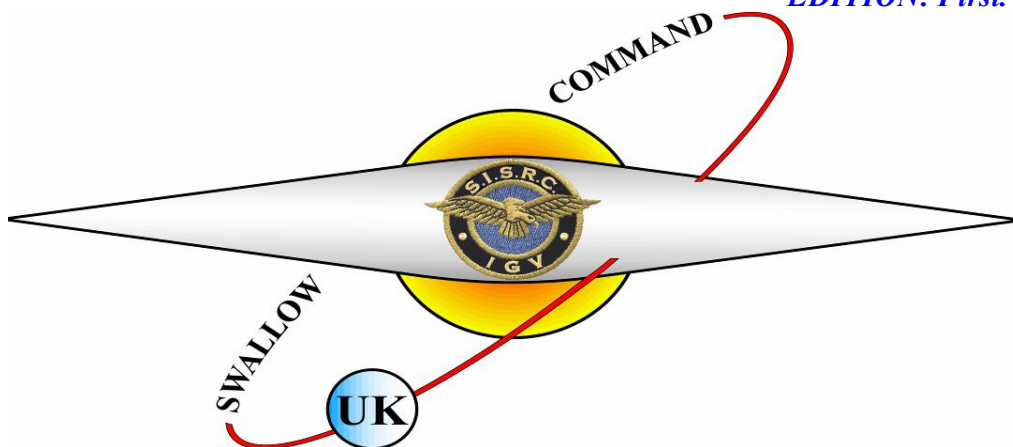
139: This document has been released to the general public by the authority of:



*Prof. John Roy Robert Searl head of R&D Human Studies.*

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*Searle International Space Research Consortium  
Mortimer – reading – Berkshire – England.*

*LOCATION : Headquarters  
DIVISION : Manned Flight R&D*