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Notes From Author

We all have something we are scared of, whether that is spiders, heights or crowds.

Most people will admit there is something which makes their
adrenaline materialise. For me that fear is flying!

The fear is considered irrational, however this does not reassure me. I find that any
impending flight fills me with anxiety subsequently ruining any
approaching holiday. Once on the flight I usually end up having a mild panic attack
and feeling upset and frustrated with myself.

One day this will change.
One day I will be airworthy.



Figure 1:
Aircraft In The Sky

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Abbreviations

Fear of Flying (FoF)

Cognitive Behavioural Therapy (CBT)

Virtual Reality Exposure Therapy (VRET)

ABSTRACT



FROM:
BHX
TO:
PMI

Flight
AC00

Seat
09



The purpose of this critical study is to outline how the fear of flying effects society and individuals. To critically analyse treatment methods which are currently available and on a broader level, research into the current shortage in aviation pilots and investigate what can be done to encourage the number to grow. This will then assist in a design proposal for a commercial interior space which will challenge to resolve these problems.

Research methods which will be used involve a combination of secondary sources and primary sources. Secondary sources include; books, newspaper articles, journals, academic research papers, and online websites. Primary sources include; a survey, discussion with industry experts, and a case study visit.

This critical study will outline ways in which fear effects society, analyse treatment methods, assess the current situation of pilot shortage and subsequently support the proposal of a functional space which incorporates the subjects discussed above and addressing to change the current issues within the aviation industry.

Context

Taken from statistics from the Mental Health Organisation, it is suggested phobias fall into the category of “common mental health problems” (Mental Health Foundation 2016). From 2007-2014 the prevalence for phobias has increased from 1.4% to 2.4% (Mental Health Foundation 2016) showing a dramatic rise.

It is suggested that one in three people are affected by the fear of flying, whether that is minor discomfort or extreme terror. (Allright 2013 also supported by Bunn 2013) This means 2.5 billion people of the world's population and around 22 million of the UK's population (based on the population in 2017) have a fear of flying.



Figure: 2
Aircraft Landing

CHAPTER ONE : LITERATURE REVIEW



FROM:
BHX
To:
DUB

Flight
LR 11

Seat
21



I n t r o d u c t i o n

The fear of flying is a broad subject area, affecting individuals in different ways, and influencing opportunities and choices. There is a variety of methods on offer to treat this phobia. This literature review aims to discuss and critically analyse why so many fear flying, how the fear effects lives, and examine the effectiveness of different treatment methods. This review will then

look more broadly at the aviation industry, and the current shortage of pilots and critical discuss why this might be and what should be done to resolve this.



Figure:3
View From
Terminal Window

Topic 1

Why Do We Fear Flying / What Are We Afraid Of?

"Some fear take-off, others fear landing, and a higher proportion are fine until the first giddy lurches of turbulence set in. Others suffer recurrent panic attacks focussing on visions of snapping wings, flaming engines, the long plummet earthwards as the plane is torn in half". (Preston, 2014) These examples show anxieties some may suffer due to worries about mechanical failure of an aircraft.

"The fear tends to coalesce around phobias of distance – vertigo and agoraphobia – and constriction – claustrophobia, and concerns about an inability to escape." (Preston, 2014) This quote shows the vast spectrum of the different fears which can affect the average aviophobe.

However, there is a category of people who suffer due to anxieties relating to other aspects, for example loss of control, being in an enclosed space, or even the fear of having a panic attack itself, as suggested by Professor Robert Bor. Bor also suggests that the fear can also be prompted by something not related to flying for example personal issues or stresses of daily life. This shows that the phobia of flying is highly complex and can often be the result of other anxieties combined.

In the opinion of Bor (as referenced by Preston 2014) there has been an increase in aviophobia since the terrible attack of 9/11. He also says "9/11 was the first time in history that people had watched a commercial aircraft accident in real time." This shows that by observing that horrendous incident this has affected many individuals, increasing their anxiety levels in flying. This opinion is supported by Gerd Gigerenzer, who argues many people developed a fear of flying after the 9/11 attacks. He describes how many Americans chose to drive to destinations instead of flying, after 9/11 (as referenced by Preston, 2014).

It is also suggested that a lack of knowledge is a main influence behind the fear of flying (Paris 2017) (Allright 2013) he argues that unfamiliarity and lack of control and knowledge all contribute to the fear of flying, and a better understanding of aeroplane mechanics, and the technical side of flying can eradicate common anxieties. He also suggests by outlining the lengthy process trainee pilots and cabin crew are subject to, individuals can be reassured they are in an environment with trained professionals. This view is also supported by Bor (2003).

Topic 2

How Is The Fear Of Flying Affecting Us?

The fear of flying (FoF) can be debilitating and effect lives on a larger scale. In support of this it is suggested that “the fear of it can have a big impact on your life and career” (Rosato, D 2014). Multiple sources state that if you are anxious you may turn down opportunities (Rosato, D 2014) (Keskinen 2015). This suggests the scale at which FoF can effect individuals and influence life choices, thus preventing opportunities. The impact of FoF on a person’s real world experiences can result in missed business opportunities and less exposure to different cultures. Keskinen is also in support of this view.

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eYamaGenta7yellowblack

Gaza invasion Israel launches offensive to target Hamas on the ground. Page 22 »

the guardian theguardian.com
winner of the Pulitzer prize 2014|newspaper of the year

Murder in the sky: missile destroys jet and kills 295

Exclusive:
‘Trojan Horse’ schools condemned

Patrick Wintour
Political editor

A damning report into extremist infiltration of Birmingham schools has uncovered a secret network of far-right groups who plotted and sustained action to introduce an Islamic curriculum into schools and move into some schools in the city.

The report, which was leaked

draft of a report, commissioned by the former education secretary Michael Gove and written by Metropolitan police chief constable Sir Bernard Hogan-Howe, will be published in the next 24 hours.

Challenging the far-right and co-ordinated agenda to impose upon Birmingham schools an Islamic curriculum, schools the segregation attitudes and practices of the far-right in the Muslim state of Saudi Arabia.

The report, which is sensitive, added that “left unchecked, this would confuse children about what they are learning instead looking monoculture that would sweep away the rich and varied patterns of life in modern Britain”.

The uncompromising report may deepen divisions in England’s second largest city and provoke a fierce debate on whether the far-right can muster muscular efforts to expose and uproot Islamophobia from Birmingham schools.

Reading for Birmingham city council as it accepted the findings of the report, ignoring evidence of extremism for years, especially from the far-right, teachers and putting the need to soothe community relations above the

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Emergency workers at the site of the crashed Malaysia Airlines Boeing 777 near the village of Grabovo, Donetsk yesterday (Photograph: Maxim Zmeyev/Reuters)

Figure:4
Guardian Newspaper Headlines

THE TIMES



Blown out of the sky

● Hundreds killed as passenger plane is shot down over Ukraine ● 154 Dutch and six Britons among dead in ‘act of terrorism’

The jet taking off from Schiphol airport

The loss of Flight MH17 was a direct

result of the conflict fuelled deliberately

by Moscow

Landing article, page 5

● would be made available directly

from the crash site, smoke fragments

of the plane and other debris were

also under investigation, according

to the Dutch minister of Justice

Hans van Klinken. He said: “The

plane was shot down by a missile

launched from Russia.”

He said: “Russia is responsible for

the downing of the plane, because

Russia is responsible for the conflict

in Ukraine.”

The Times

Friday July 18 2014 | thetimes.co.uk | No PDS

Only £5.99 to subscribe

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</div

Topic 3 Treatment Methods

3.1 Cognitive Behavioural Therapy

A study completed by Margot Ferrand et al suggests that cognitive behavioural therapy (CBT) can cure aviophobia, which considered the effectiveness of cognitive therapy and virtual reality methods on lowering levels of anxiety. The source suggests that cognitive-behavioural group therapy (CBGT) is more effective than behaviour group therapy (BGT) (Ferrand, et al., 2016).

This is seen in the results of a study comparing behavioural and cognitive group treatment for the FoF.

The research supporting Ferrand's claim shows that after a three month follow up seven participants who participated in BGT requested an extra guided flight compared to only three participants who partook in CGBT. (Gerwena, et al., 2006)

These findings suggest that cognitive therapy had a positive outcome on the participants and reduced their levels of anxiety related to FoF. The findings also show that the participants would consider flying again suggesting they have been cured. However it must be noted that the study has not followed up whether the participants did fly again, therefore it cannot be confirmed that the participants would not suffer from anxiety related to flying on a future flights.

In criticism of using CBT, Captain Tom Bunn argues that CBT is not the best method of therapy to use as it "involves high-level thinking [...] to replace impressions that produce anxiety with well-examined thoughts" (Bunn 2013). He also describes how the high level of stress hormones experienced by many whilst flying can override the high level of thinking required. Ultimately CBT relies upon the subjects to recondition their thoughts which makes CBT inherently unreliable as sole coping mechanism.



Figure:6
Man and Watering Can Illustration

3.2 Virtual Reality (Exposure)

In more recent years to treat the FoF a combination of CBT and virtual reality exposure therapy (VRET) have been used and seen to be very effective when combined. In a study conducted by Czerniak et al. (2016), it is suggested that by using a motion based virtual reality system which simulated a typical flight they were able to decrease the levels of anxiety in three participants who suffer from FoF.

Compared to the previous study discussed this study found good evidence to suggest the anxiety levels of the participants had been lessened as 66% of participants went on flights a month after the study was completed and then again nine and eighteen months subsequently. A follow up investigation is important when measuring the effectiveness of the treatment as numbers may deteriorate over time.

In support of using virtual reality as a treatment method for FoF, another study conducted by Max. M. North (2003) found that after five sessions in a virtual reality environment subject's anxiety levels had been reduced, consequently alleviating their fear of flying.

Figure:7
Flight Simulator





Figure:8
Aerial View Of Airport



Figure 9
View From
Aircraft Window



Figure:10
Wine Glasses

3.3 Alcohol and Medication

Many individuals use alcohol and anti-anxiety medication to calm their nerves whilst flying. Wilhelm and Roth (1997) suggest “many individuals with flying phobia engage in avoidance of flying and report using anxiolytic medication and/or alcohol to help manage the anxiety symptoms when they do fly”. This is particularly potent as people are not consulting other forms of treatment first before resorting to alcohol.



Figure: 11
Pills

“Anxiety medications entail significant risks in flight and provide little if any benefit.” (Bunn 2013) This suggests that medication can cause more harm whilst flying at altitude, reacting differently in the body, causing a heightened level of anxiety. Bunn (2013) also suggests that anti-anxiety medication actually increases sensitivity to flying and complicates future treatment.

This view is supported by Bor, "People use alcohol, medication, recreational drugs, but although they may allay some symptoms of fear briefly, they actually tend to intensify the problem." (Bor, as referenced by Preston 2014) He continues to suggest alcohol and medication effect the individual at high altitude, "One glass of wine on the plane is equivalent to nearly two on the ground." (Bor, as referenced by Preston 2014)

Even though medication and alcohol are what would seem like a quick effective solution to anxiety and easily accessible, the evidence that has been discussed suggests that medication and alcohol react differently whilst at altitude. This creates reliance for passengers making other treatment methods less effective in the future, consequently worsening the anxiety related to flying and ultimately makes the fear of flying worse.

Topic 4

Pilot Shortage

In recent years there has been a decrease in the number of pilots qualifying worldwide. (O'Loughlin 2016) It is estimated that from 2016 to 2035 there will be a demand of two million commercial pilots, maintenance technicians and cabin crew. (Boeing 2016)

Many young people do not have the financial funds (Gabriel 2017) to invest into aviation training thus making it unobtainable for some. Also aspiring pilots must pay a huge sum, usually around £100,000 to train and even then, they are not guaranteed to be successful at the end as supported by Smith (2017).

In another view it is suggested that marketing and promotion of pilot training needs to change. "The problem lies in how the pilot training industry has marketed itself" (Gabriel 2017 as referenced by McMahon 2017) this shows that there needs to be better advertising regarding pilot training to promote the industry and attract more applicants.



Figure:12
Female Pilot
In Cockpit

4.2 Female Pilots

There are far fewer female pilots compared to male pilots. It is suggested that worldwide just 3% of pilots are women and in the UK there are just 6% female pilots (Choat 2017).

In the opinion of Marian Wooldridge (deputy chair of the British Women Pilots' Association) (referenced by Choat 2017) She feels that more female role models are needed to inspire young females to get involved in the aviation industry. Like this view, Melissa Holland-Smith (senior first officer and pilot at British Airways) stated "Perhaps girls don't consider a career as a pilot because they don't see women in the media as pilots, they're generally played by men. We need to break down that stereotype." (Holland-Smith as referenced by Morris 2015)

The above discussion shows that something must be done to change the stereotypes associated with gender and aspiring pilots, to encourage and inspire more females to become involved within the aviation industry.

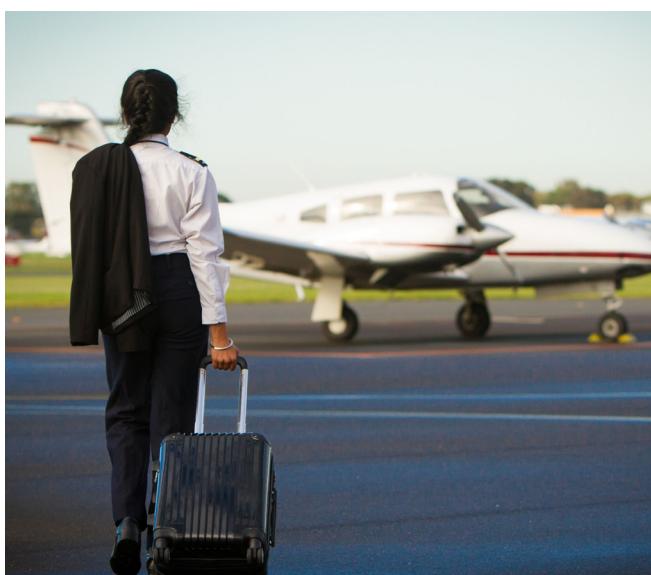


Figure: 13
Female Pilot
Approaching Aircraft

L i t e r a t u r e R e v i e w

C o n c l u s i o n

In conclusion this literature review has demonstrated there are different reasons why individuals are fearful of flying, and evidence to show the phobia can be debilitating, effecting lives on a larger scale.

The review has also critically examined various treatment methods and found evidence in favour and in criticism of each one, concluding a combination of methods are best used to treat the phobia. This review has also analysed the current pilot shortage and discussed reasons why this might be.



Figure:14
Plane Engine

CHAPTER 2: CASE STUDIES



FROM:
BHX
TO:
FCO

Flight
CS22

SEAT
20



2.1 Case Study One- The Emirates Aviation Experience, London



Figure:15
Interior EE 1

The Emirates Aviation Experience opened in 2013 and is located on the river bank of the Thames London, connecting the Greenwich and Royal Victoria Docks.

Designed by Wilkinson Eyre, the complex is composed of cable cars which travel across the river between two towers, and a museum comprised of interactive aviation exhibits.



Figure:16
EE Exterior 1

This project was selected to analyse as it is unique, linking strongly to aviation. The research sources used in this case study include; magazine articles, newspaper articles, video recordings and websites.



Figure:17
EE Exterior 2

The aim of the project was to give users an insight into the world of commercial aviation and provide a transport link across the river.

Upon entry passengers are given a boarding pass to travel on the cable cars. Inside the exhibition space there are many interactive educational games showing the workings of engines and other features of a typical commercial aircraft. The technology within the space is highly advanced, with a 360-degree hologram, four simulators (to pilot a plane) and a 48-screen video wall showing typical scenes expected in an airport for example the view from a terminal building.



Figure:18
EE Cable Car

The interior of the exhibition space replicates that of a typical airport. From entrance the flooring is grey tiled to mock up a runway, directing users around the space.

The stairwell is also carpeted in grey and spot lighting runs alongside the stairs to add to the runway appearance and acts as guide to help with movement.



Figure:19
Interior EE 2



Figure:20
Interior EE 3

Colours used include blue, white, grey and red. The combination of white and grey on many fixtures and fittings creates a sleek contemporary feel with essence of a space craft. Curved acoustic panelling has also been used suspended from the ceiling, replicating the feeling of flying.



Figure:21
Interior EE 4

Areas of walls are painted blue with images of clouds, this adds to the experience of flying. There are hints of red around the space which portray the branding of Emirates. It could be described that the space is a publicity stunt for Emirates rather than an experience for aviation enthusiasts.



Figure: 22
Interior EE 5

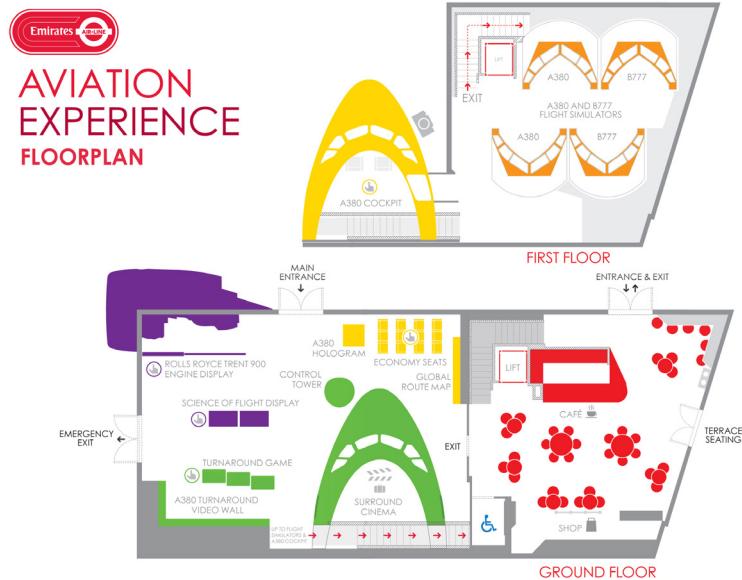


Figure:23
Floor Plan EE

The Emirates Aviation Experience appears to be a highly stimulating and interactive. The likely clientele would be aviation enthusiasts; however, tourists and other passers-by may visit the space. The space is filled with advanced technology and educational material. The interior links highly with the theme of aviation but could be criticised as being a marketing tool for Emirates rather than an educational experience.

Figure:24
Flight Simulator EE



Figure:25
Exterior TWA



2.2 Case Study Two- Trans World Airline Terminal, New York

The Trans World Airline (TWA) was designed by the late Eero Saarinen completed in 1962.

The terminal has been described as a “concrete symbol of the rapid technological transformation which was fuelled by the outset of the Second World War.” (Fiederer 2016)

The function of the building was a terminal for TWA but has been described as “a monument to the airline and aviation itself”. (Fiederer 2016) In 1955, just after the Second World War the proposal for the terminal was at a time when airlines were beginning to create brand identities and new terminals were being built in response to this. Travel by aeroplane was now seen to be a glamorous, luxurious mode of transport.

Figure: 26
TWA Stairs

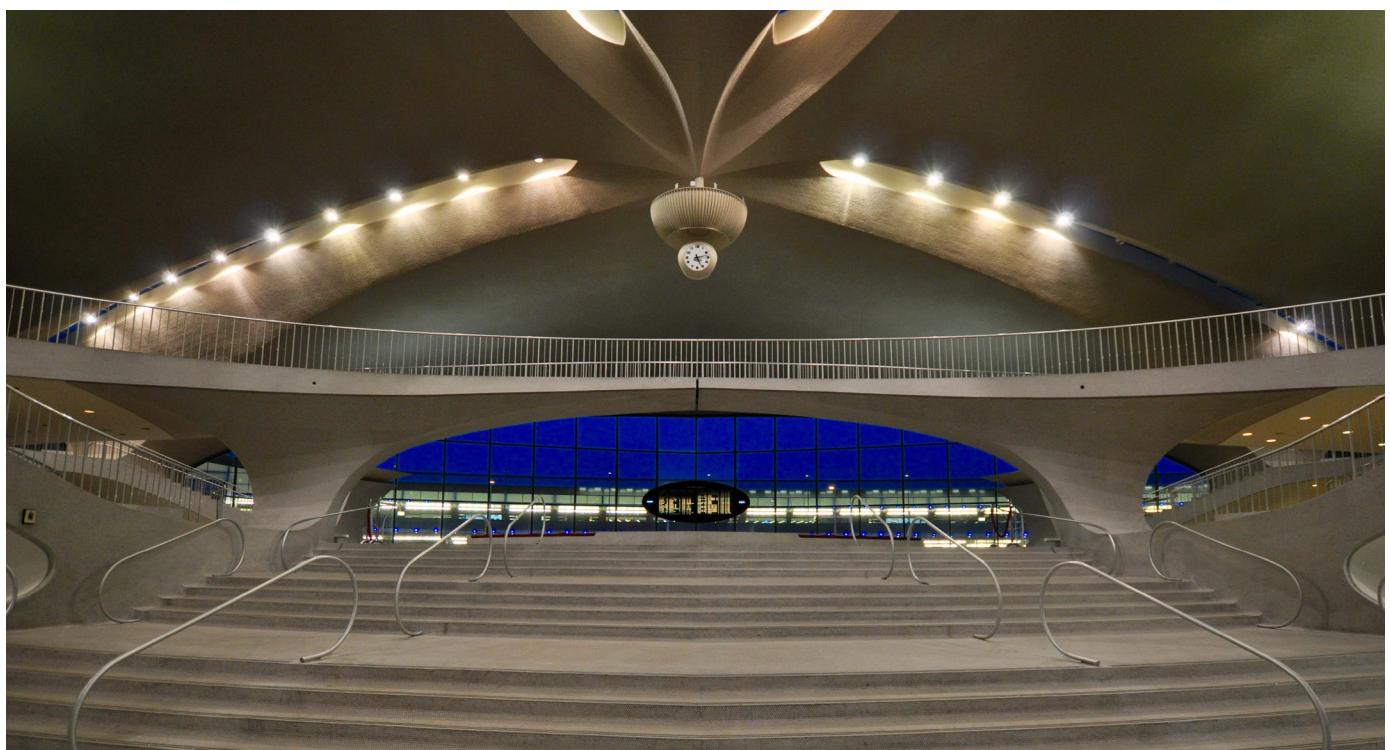




Figure:27
TWA Waiting Area 1

The aim of the project has been described "to capture the sensation of flight in all aspects of the building." (Fiederer 2016) This can be observed in all areas of the building. The structure is made up of four curved concrete shells which meet in the middle, featuring a clock which hangs gracefully.



Figure:28
TWA Waiting Area 2

The shell structure appears wing-like in its appearance and makes a huge statement in the surrounding area. The structure can be described as resembling an aircraft or bird. Saarinen insisted inspiration for the form came from "an abstraction of the idea of flight itself." (Fiederer 2016) The combination of the heavy industrial material of concrete with the symbol of flight and weightless create an opposing concept but in appearance is aesthetically pleasing.

Figure: 29
TWA Waiting Area 3



Each segment of the shell structure is separated from the adjacent section by a strip of glass forming a roof light. This pours light into the space, and reminds the users of the outside world, more specifically the sky, making links between travel through air.



Figure:30
TWA Waiting Area 4

The fluidity feature on the exterior continues all the way through the interior, creating a contiguous form. Because of the roofs' shape, this allowed for a spacious interior when was not limited to any boundaries, which adds to the concept of flying, as the sky has no limit.

Circulation has clearly been a true consideration throughout the whole project. "We wanted passengers passing through the building to experience a fully-designed environment."
(Saarinen 1959 as referenced by Gossel et al 2012)



Figure:31
TWA Waiting Area 5



Figure:32
TWA Tunnel 1

Visitors enter through a cantilevered canopy, into the ground floor space.

Waiting rooms are hidden away allowing for a view through the spectacular window where airport activity can be observed.

Staircases are curved, columns are coherent, handrails, signage, check-in desks all match in this nature, making a seamless, graceful interior.

The interior finishes are in the TWA crimson red and white colour scheme to reflect their brand.

Unfortunately, as airlines grew the terminal could no longer accommodate the size of the aircraft and meet the demands it was previously functioned to do so, therefore closing in 2001. As the building is registered in the United States National Register of Historic Places the preservation of the building has been secured. There are now plans to reconvert the terminal into an airport hotel, still reflecting the appearance of the post war building.

Figure:33
TWA Tunnel 2



2 . 3

Primary Research

Online Survey

A survey of 60 participants between the ages 16-50+ was carried out to understand and evaluate which parts of flying cause the most anxiety, what methods are currently being used by the public to treat anxieties and if flying is having a greater effect on them.

The majority (58%) said they have suffered from anxiety related to flying, and the two most distressing parts of flying were take-off and turbulence (both at 34%). This shows that there should be an improved understanding of what happens to an aircraft during take-off and turbulence.

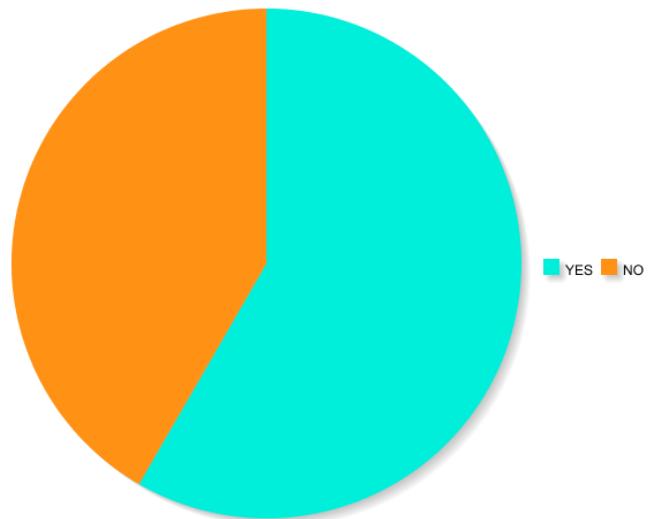
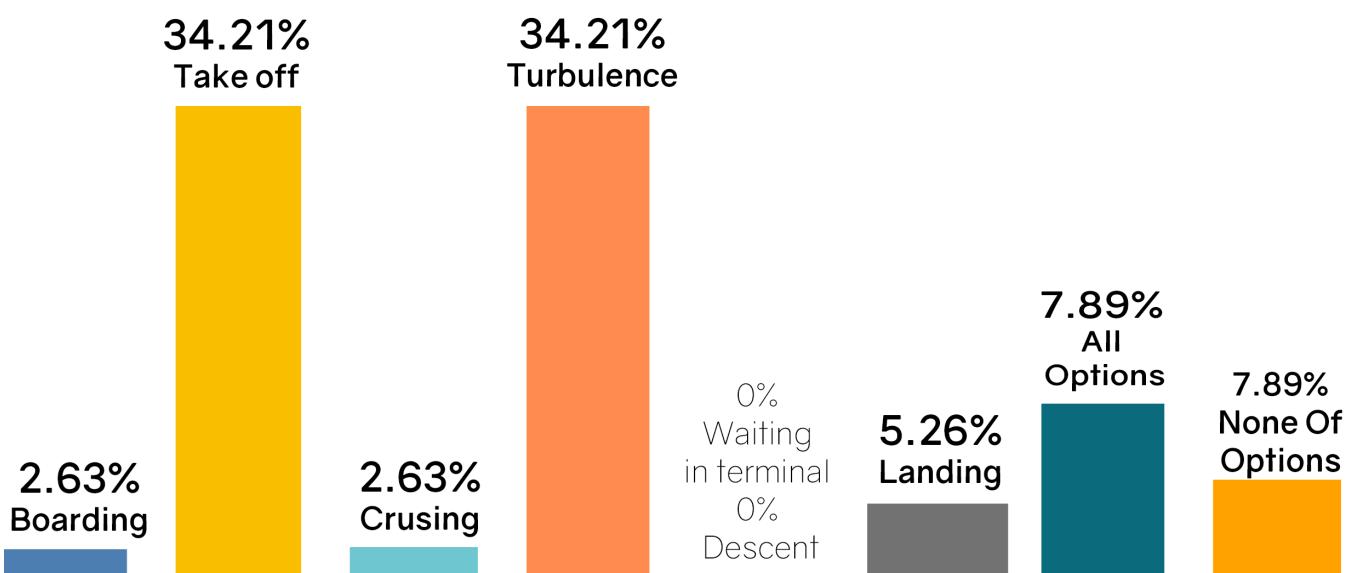
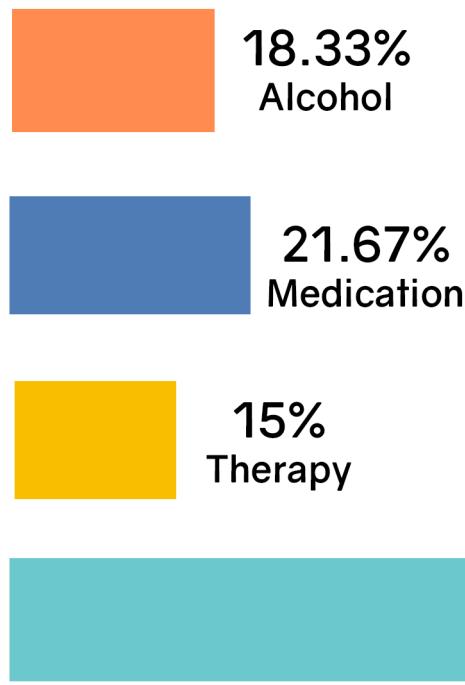


Figure:34
Survey Pie Chart

Figure:35
Survey Bar Chart 1



Regarding coping strategies, 21% (13 people) said they would consider using medication to cope with anxieties and 18% said alcohol (11 people). In the comments section 9 people suggested other ways they deal with their anxieties, including breathing exercises, visualisation, pray and talking to others on board. This shows that there are other methods individuals use.



When asked if participants would consider seeking help 76% (46 people) said no, this is an interesting piece of data as more information should be gathered why this might be, as is it is not necessarily the fact individuals do not want help, it could be due to lack of time, lack of knowledge of resources, sceptical opinions about the nature of therapy, or costing concerns.

Figure:36
Survey Bar Chart 2

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Discussion With A Hypnotherapist



100% success in two aviophobics
Techniques:
EMDR
Visualising
Fast rewind techniques

Figure:37
Hypnotherapy
Pendant

PRIMARY RESEARCH



Figure:38
Royal Air Force
Logo

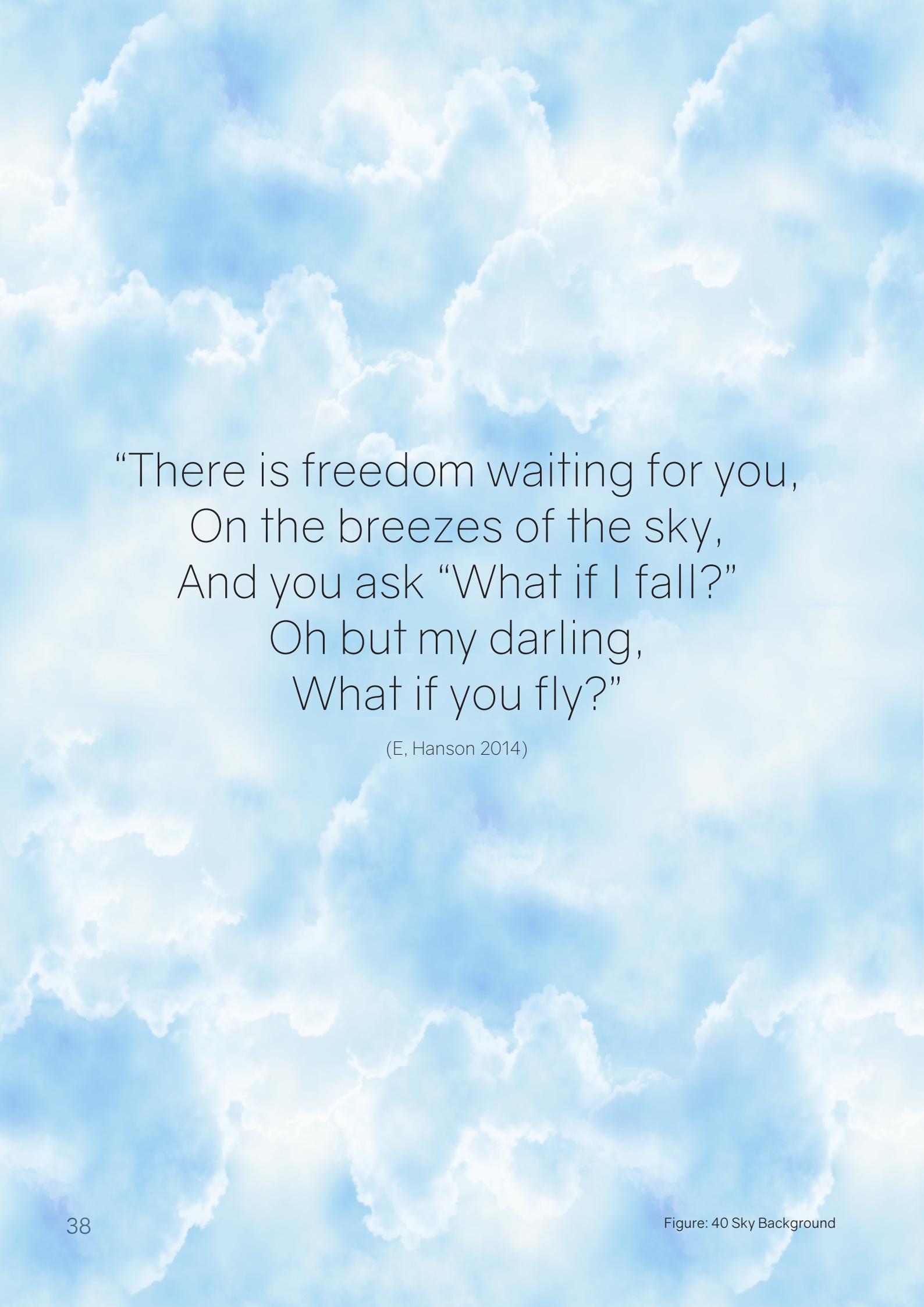
Royal Forces Recruitment Office (Birmingham)

The purpose of the Royal Forces Recruitment Office is to advertise and recruit new entrants. Upon visiting the centre it was established that the main purpose was a space for interviews, and training was done elsewhere. The building was comprised of a reception, waiting area, open spaces for informal interviews and then closed off rooms for formal interviews. The office was highly functional yet lacking in aesthetics.

(Please refer to appendices for further information)



Figure:39
Exterior Of
Royal Forces
Recruitment Office



“There is freedom waiting for you,
On the breezes of the sky,
And you ask “What if I fall?”
Oh but my darling,
What if you fly?”

(E, Hanson 2014)

CHAPTER 3 :
PROJECT PROPOSALFROM:
BHX
TO:
VLCFlight
PP22Seat
21

3.1 Project Topic

The project will be a centre for both individuals who suffer from anxiety related to flying and travel to seek support and for aviation enthusiasts who want to learn more about the aviation industry. The centre will offer a chance be educated, an opportunity to experience something unique, provide a platform for social interactivity and a place to change mind-set and promote aviation in a positive light.

3.1.1 Target Market

User 1

The target market for this project will be individuals whom are fearful of flying or suffer a degree of anxiety related to flying/travel. The age range of these individuals can vary from as young as six years of age to senior.

User 2

The centre will also be targeted at individuals who are interested in aviation, to promote the industry and inspire individuals to consider pursuing a career in aviation (pilots, cabin crew, technical engineers). The age range for these individuals can vary, however the emphasis will be to encourage the young and females.



Figure: 42
Man Waiting In Terminal

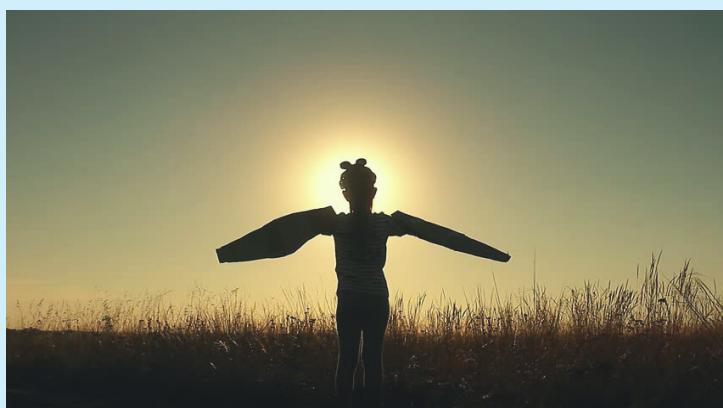


Figure: 41
Child With Toy Wings

3.1.2 Function

The space designed will be multifunctional and adaptable to suit both target groups requirements, potentially at the same time.

Function 1

To educate individuals on methods and different treatment techniques to support their phobias related to flying and travel as shown in research a combination of techniques is the best way to treat the fear of flying.

Function 2

To provide an introductory, training session for individuals aspiring to be pilots or cabin crew. To inspire and motivate young individuals to be enthused by the aviation industry and consider it as a career path as shown in research the number of applications for aspiring pilots is decreasing.

Function 3

To provide a space where both users can socialise and learn from each other, as shown in research there are many advantages to learning more accurate knowledge that each user would have to offer.

3.1.3 Mission

The mission for the project will be to help individuals combat their fears in a safe environment, learn through observation and communication the mechanical workings of aircrafts. Finally to get them to book themselves onto an actual flight to prove their fears have been eradicated

For target user two the mission is to inspire individuals about the aviation industry. To also allow individuals to share a space and educate each other.

Project Context

3.2.1 Unique Selling Point

The unique selling point (USP) for this project is that this will be the first walk in centre which combines both education to combat the phobia of flying and also a training facility for individuals interested in the aviation industry.

At this current time all fear of flying courses and introductory pilot training cost a considerable amount of money. This project will challenge the twenty-first century as it is the first centre where individuals can explore a variety of treatment methods all in one place, and without booking or registration and share a space with individuals who are aspiring to work in the aviation sector.

3.2.2 Design Principles

It is essential that the centre inspires and motivates its users. The centre should provide reassurance, consolation, encouragement and optimism. The space will accommodate different users to inspire and change attitudes towards aviation.

3.2.3 User Benefits

One of the user benefits for individuals who suffer from the fear of flying is to see the training process workers in the aviation industry go through and all safety requirements there are in relation to aviation.

Target user two will also benefit from the centre as they will have the opportunity to experience what working in the aviation industry is like.

3.2.4 Stakeholders

Potential stakeholders could include major airlines and pilot training providers such as CAE Oxford.

These airlines would benefit from the project as there will be encouragement to book an actual flight once the individual feels they have received enough support, therefore providing these airlines with business. Airline companies and training providers will benefit as potential pilots will be inspired to apply.

Another potential stakeholder is major travel agents. By advertising the booking of a trip away once treatment has been successfully completed, this could involve a travel agent on site, bringing in business for the travel agent through the project and paying rent for the space.

3.2.5 Potential Funding

In terms of potential funding for this project, it is proposed that the concept within the space will also be implemented into airports around the country, for example in Birmingham Airport in the form of a kiosk. There will be a small area implemented in each airport which advertises information about the project and a sample version of what the main scheme has to offer. Airlines advertised, training providers and travel agents will all be paying for their advertisements.



Figure:43
Easy Jet Logo



Figure:44
BA Logo



Figure:45
Emirates Logo

Site and Location

3.3.1 Location and Site Analysis

1 Newhall Street Birmingham is the selected site for this project, currently a 50,000 sq ft, eight storey building with a two basement levels used for rented office space, previously known as Phoenix House.

The building is in the prime location, being in the heart of the Colmore Business District. The current site has a specular symmetrical glazed front and dominates its urban context.

No. 1

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Figure: 46
N.O. 1 Newhall St
Font





Figure:47
N.O. 1 Newhall St
Exterior 1

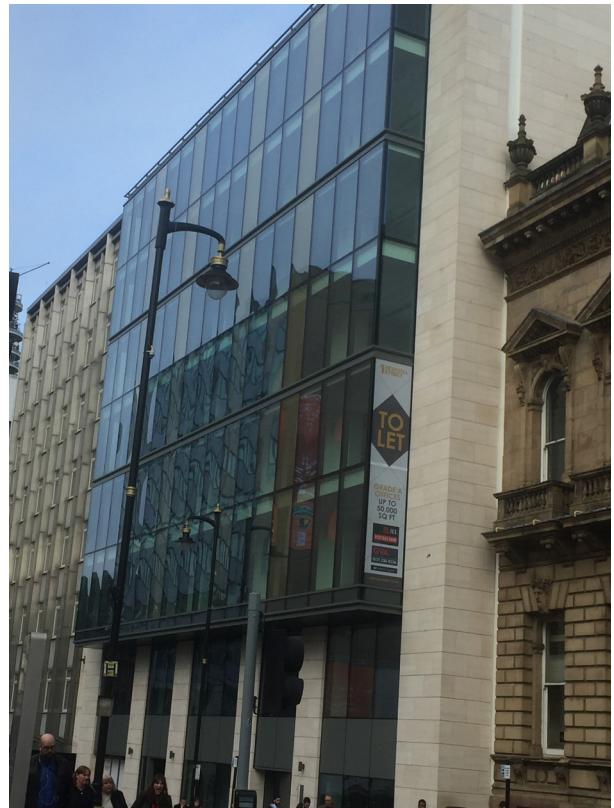


Figure:48
N.O. 1 Newhall St
Exterior 2



Figure:49
N.O. 1 Newhall St
Exterior 3

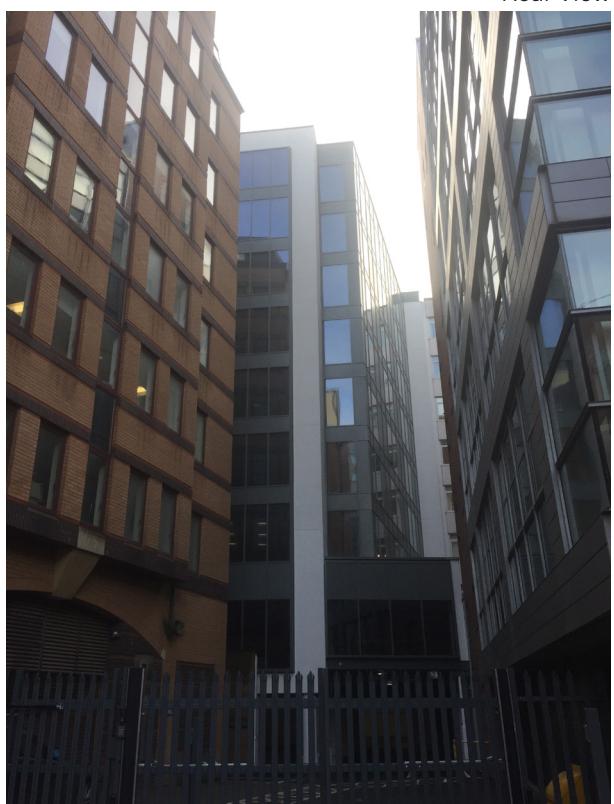


Figure:50
N.O. 1 Newhall St
Rear View

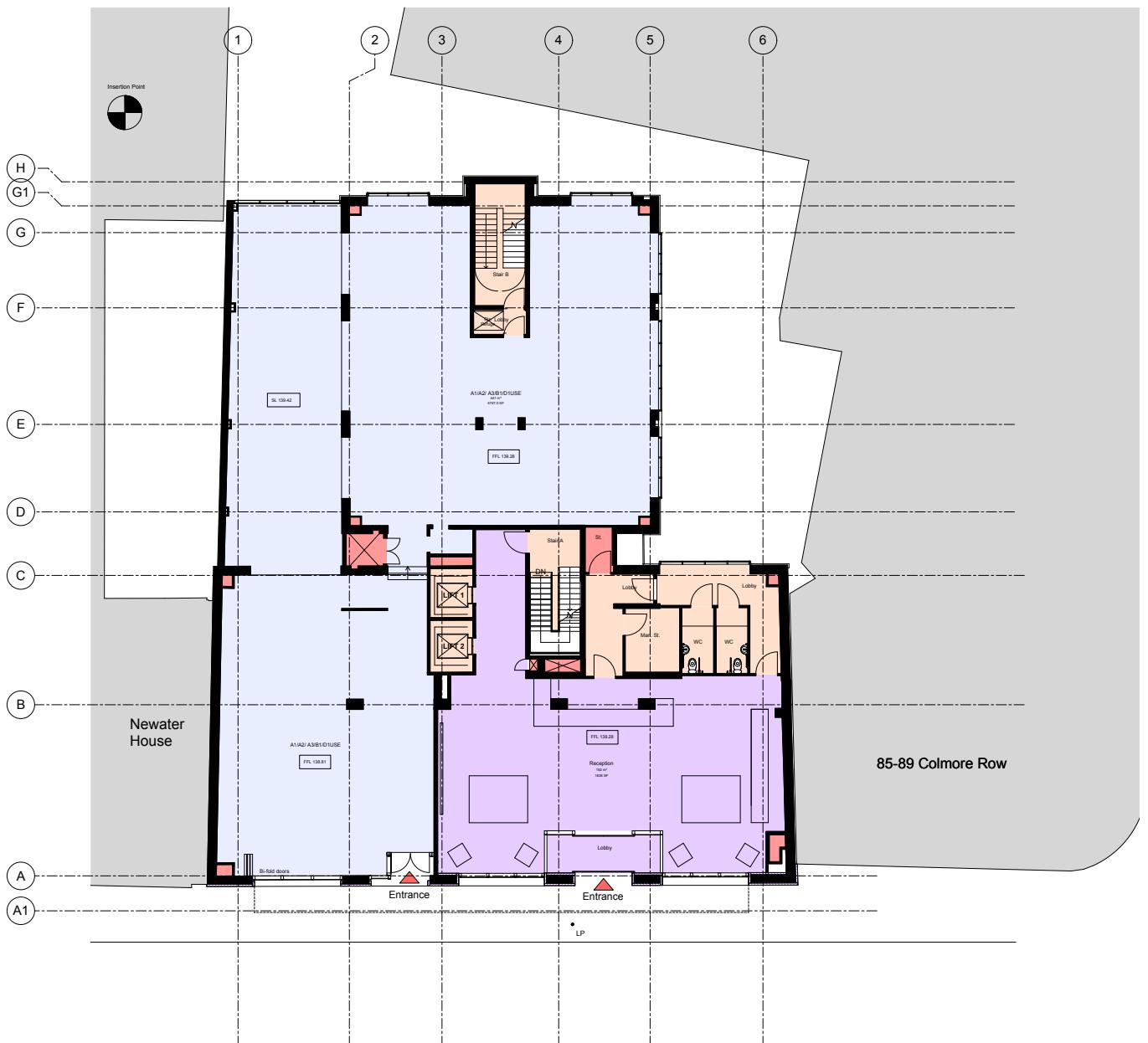


Figure:51
N.O. 1 Newhall St
Ground Floor Plan

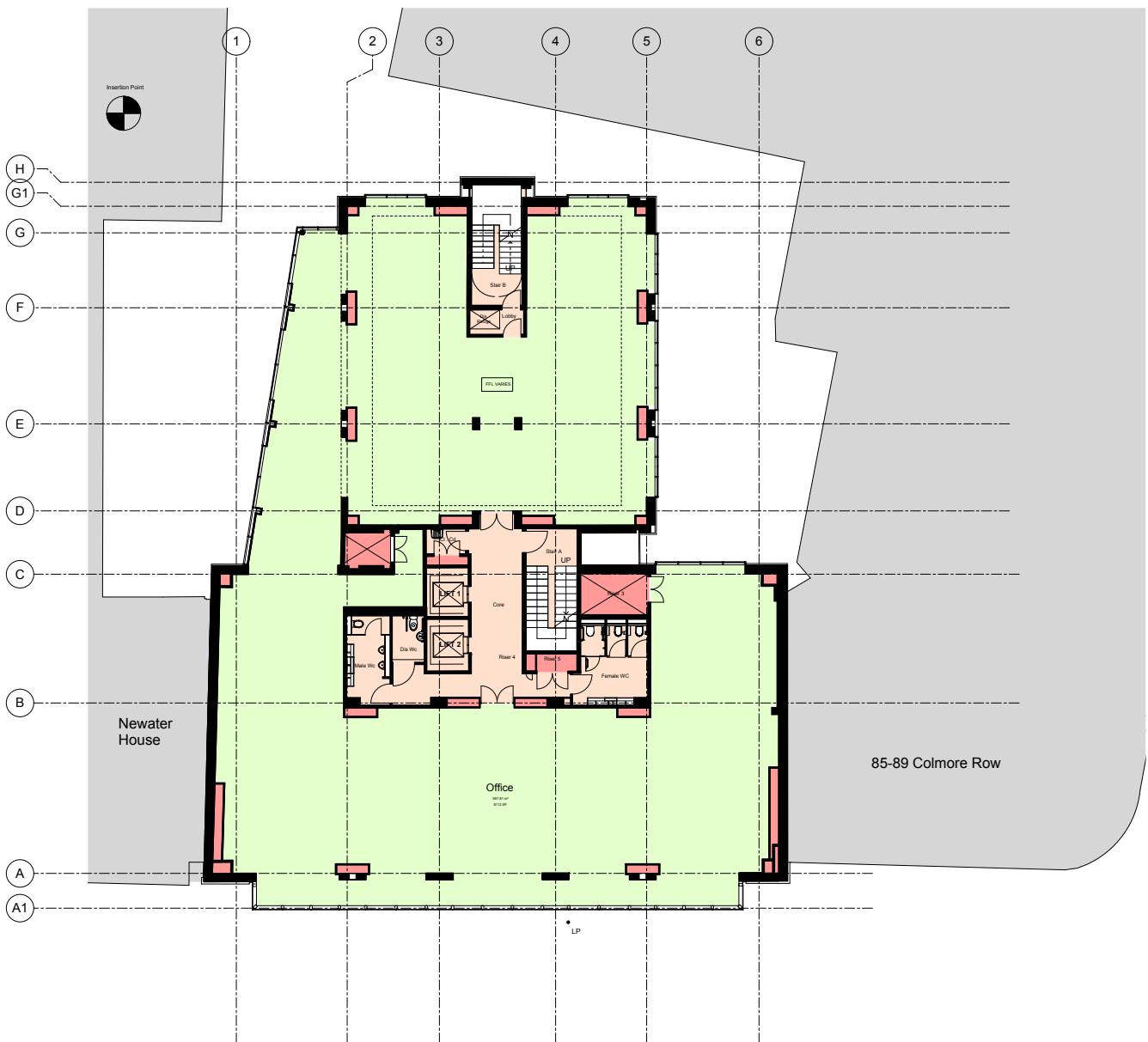


Figure:52
N.O. 1 Newhall St
First Floor to Seventh
Floor Plan

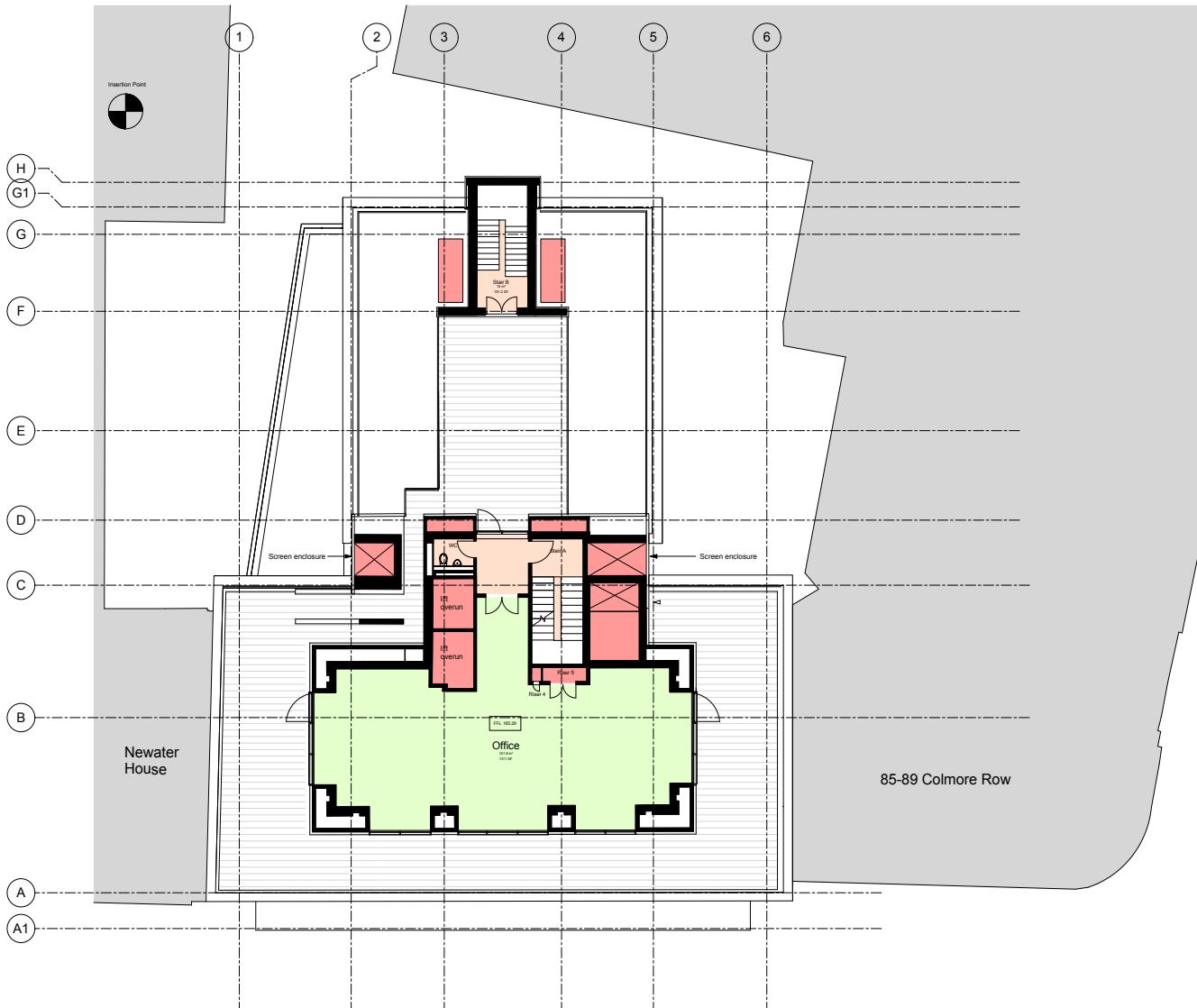


Figure: 53
N.O. 1 Newhall St
Eighth Floor Plan

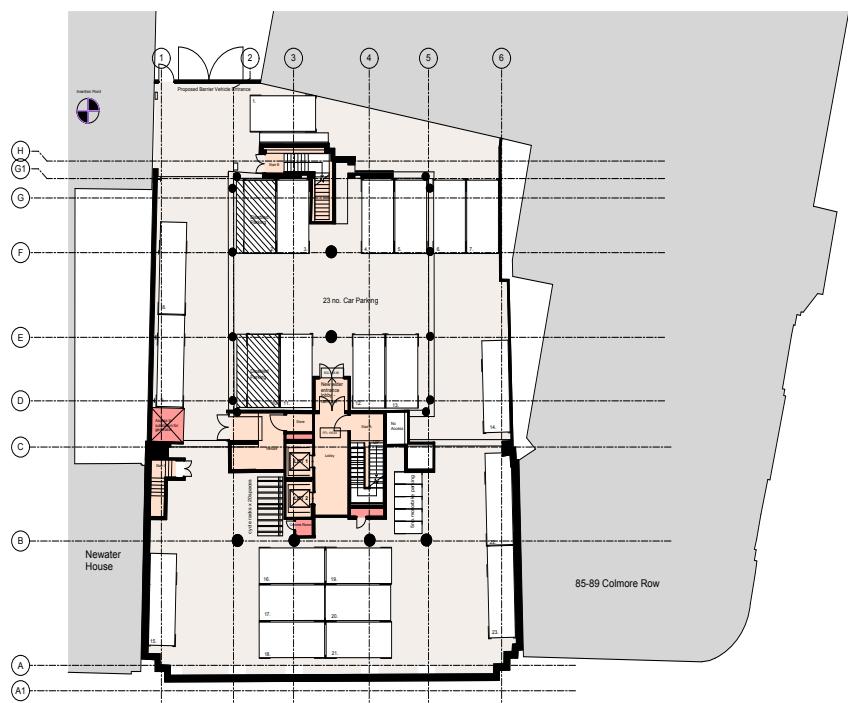


Figure:54
N.O. 1 Newhall St
Basement -1 Floor Plan

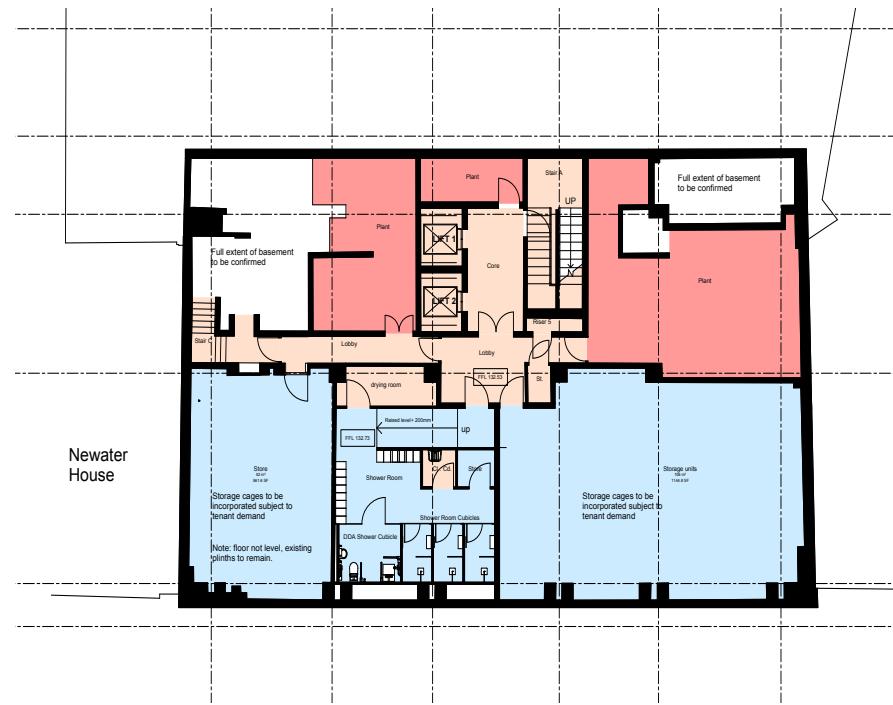
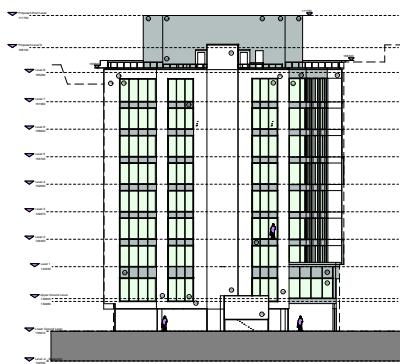


Figure:55
N.O. 1 Newhall St
Basement -2 Floor Plan

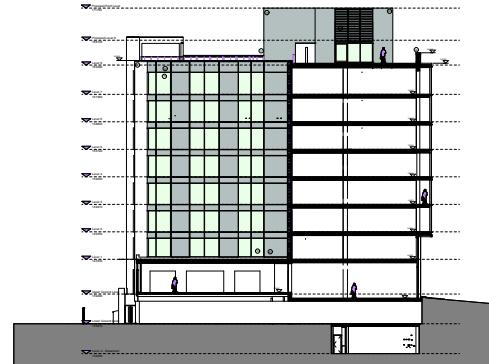


South West Elevation

South East Elevation



North East Elevation



North West Elevation

Figure: 56
N.O. 1 Newhall St
Elevations

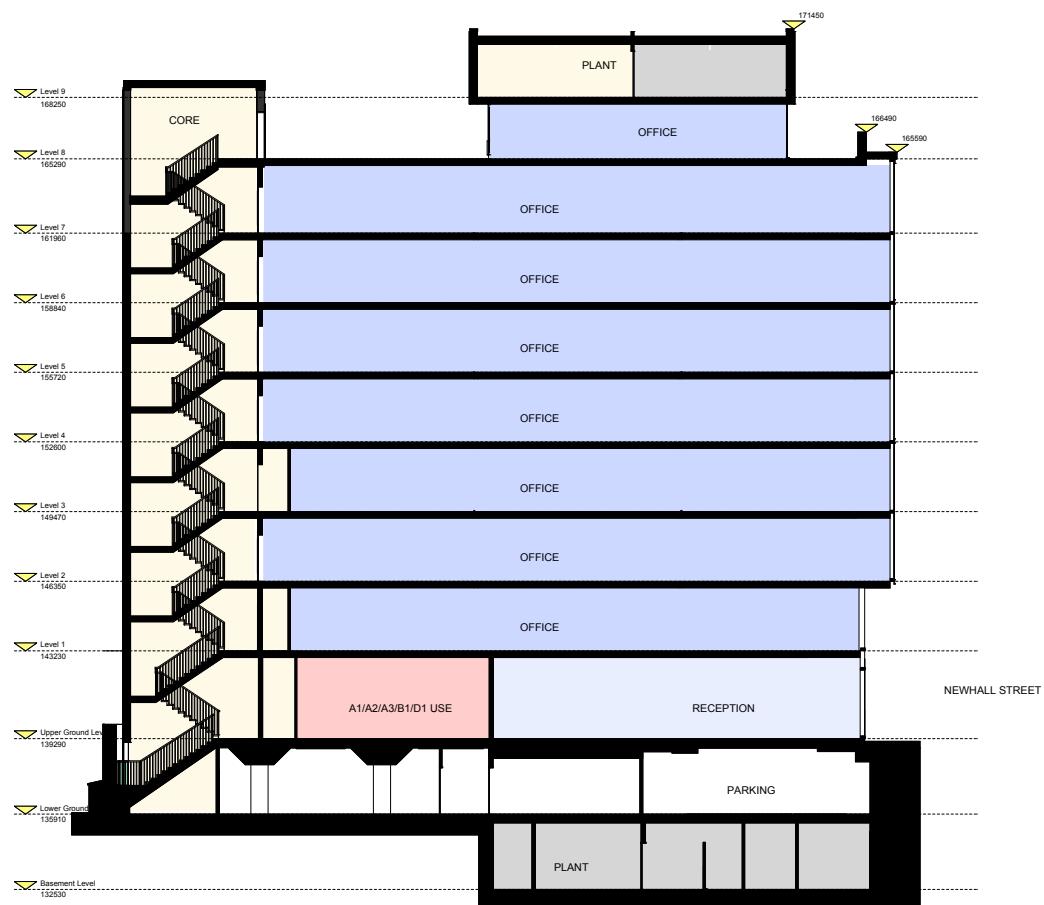


Figure:57
N.O. 1 Newhall St
Section A-A

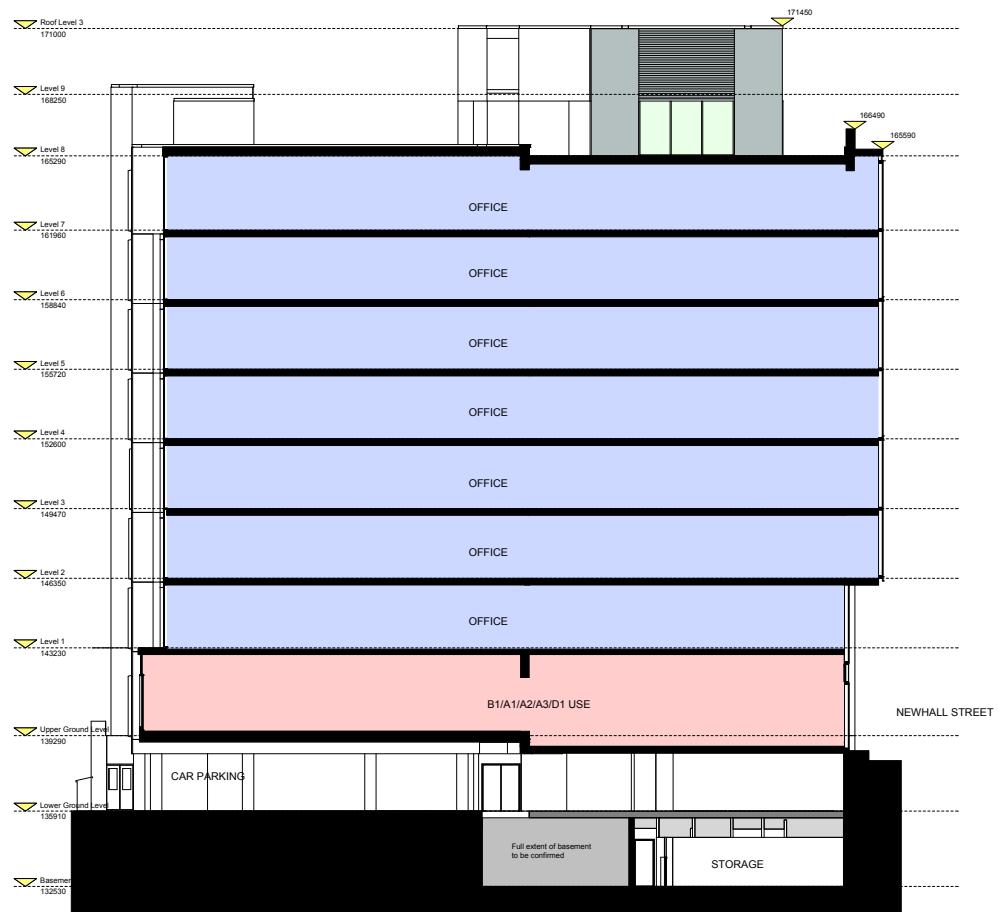
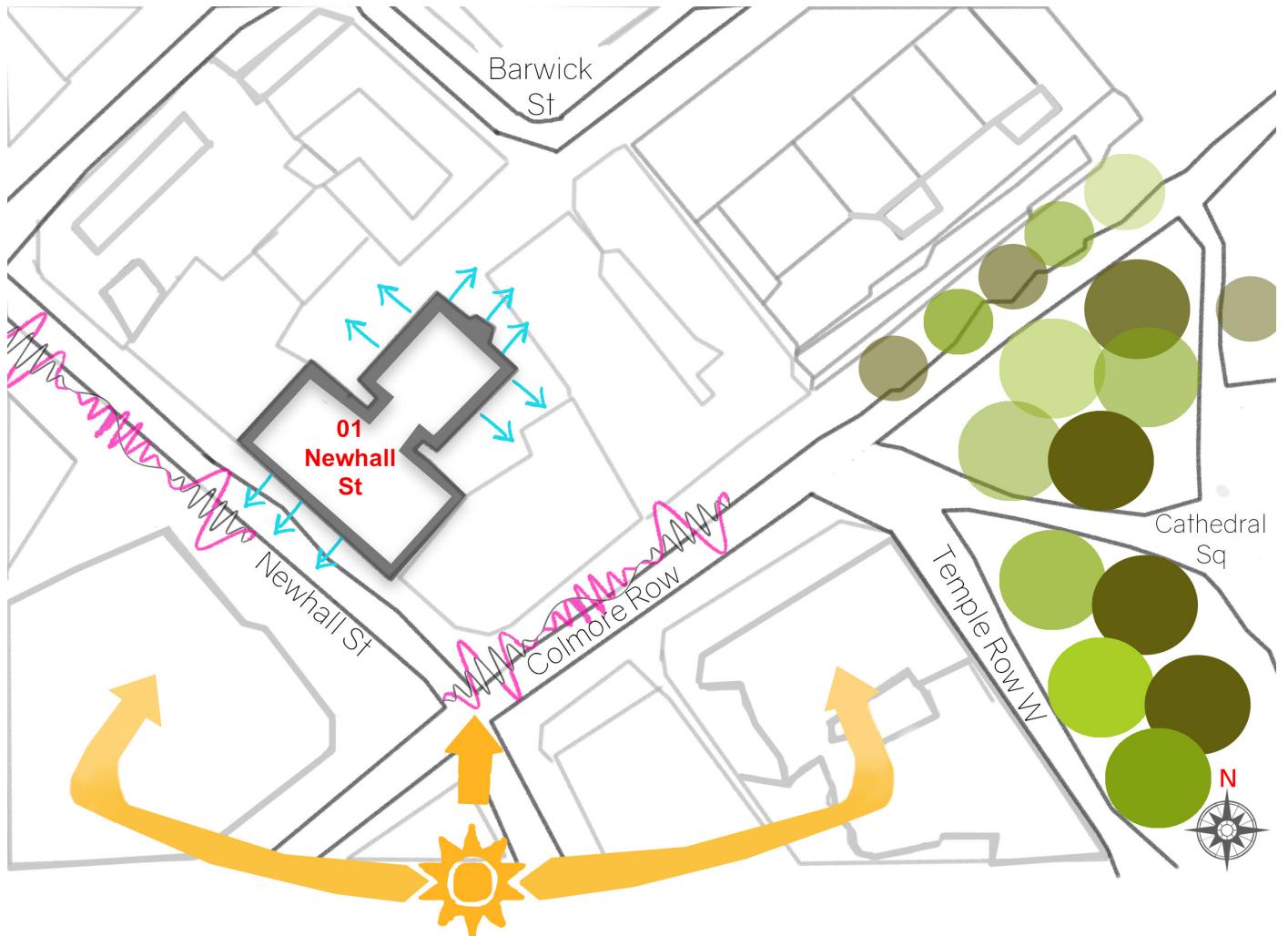


Figure: 58
N.O. 1 Newhall St
Section C-C



Noise pollution
 Views from site
 Sun path
 Figure:59
 Site Analysis
 (Sun Path, Noise Pollution, Views)

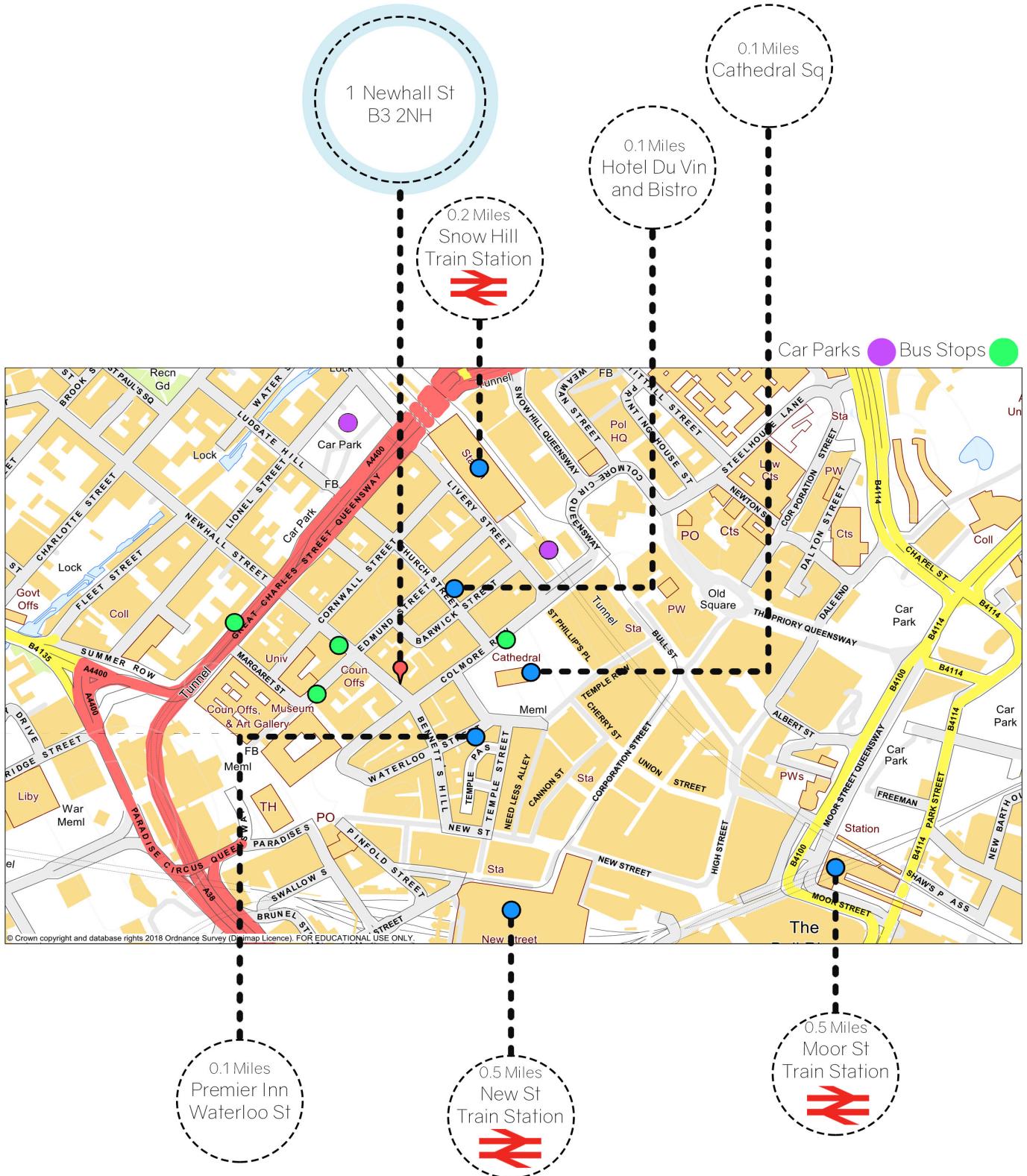


Figure:60
Site Analysis
(Transport, Places Of Interest)

3.3.4 Accessibility

Accessibility is key for this project; the site must be accessible for anyone to simply drop in. The reasoning for choosing a site which is the city centre of Birmingham is so that users do not have to travel far, as travelling could heighten their anxiety if they are worried about visiting. The chosen site is highly accessible by several modes of transport including: trains, trams, buses, car and walking.

The proposed design will be in the form of a walk in centre so that anyone can come in as they are passing. This will mean advertising and clear function of the building is displayed on the exterior to catch the public's attention.



Figure:61
New St Train Station



Figure:62
Snow Hill Train Station



Figure:63
Moor St Train Station

3.4 Brand Identity

The name for this project is Airworthy. This name has been chosen as the official term means "safe to fly"
(Oxford Dictionary 2000) however as a name for the project the word could associate with encouraging the users to take to the skies, as teaching them has made them realise it is safe to fly.

The slogan for the project is
"take off to your destiny."



Figure:64
Logo Development



3.5 Schedule of Accommodation

This centre will accommodate treatment by offering several different methods. These include a space to conduct CBT, this will require numerous seating and areas of relaxation, and some private areas. Also, within the space there will be a large area to experience exposure to a normal flight, in the form of a virtual reality machine. This area will be used for both therapy and training purposes to allow observation from both users and provide a wider learning experience.

Within the space there will also be an area where both airline companies and travel agents can set up a small exhibition/stand promoting their companies. For user one an area to book a trip with the travel agent to successfully complete their fear of flying therapy and for user two to apply to an airline for a training course.

3 . 5 . 1 Colour Scheme



Figure:65
Colour Scheme
Diagram

3.5.2 Furniture and Fittings

Fixtures and fittings which could feature throughout the space may include recycled aircraft furniture.

Potential suppliers;
Dappr Aviation,
Eamsi ,
Skyart.



Figure:66
Recycled
Chair



Figure: 67
Recycled
Chair Pod



Figure:68
Recycled
Table

3 . 6

Concept Development

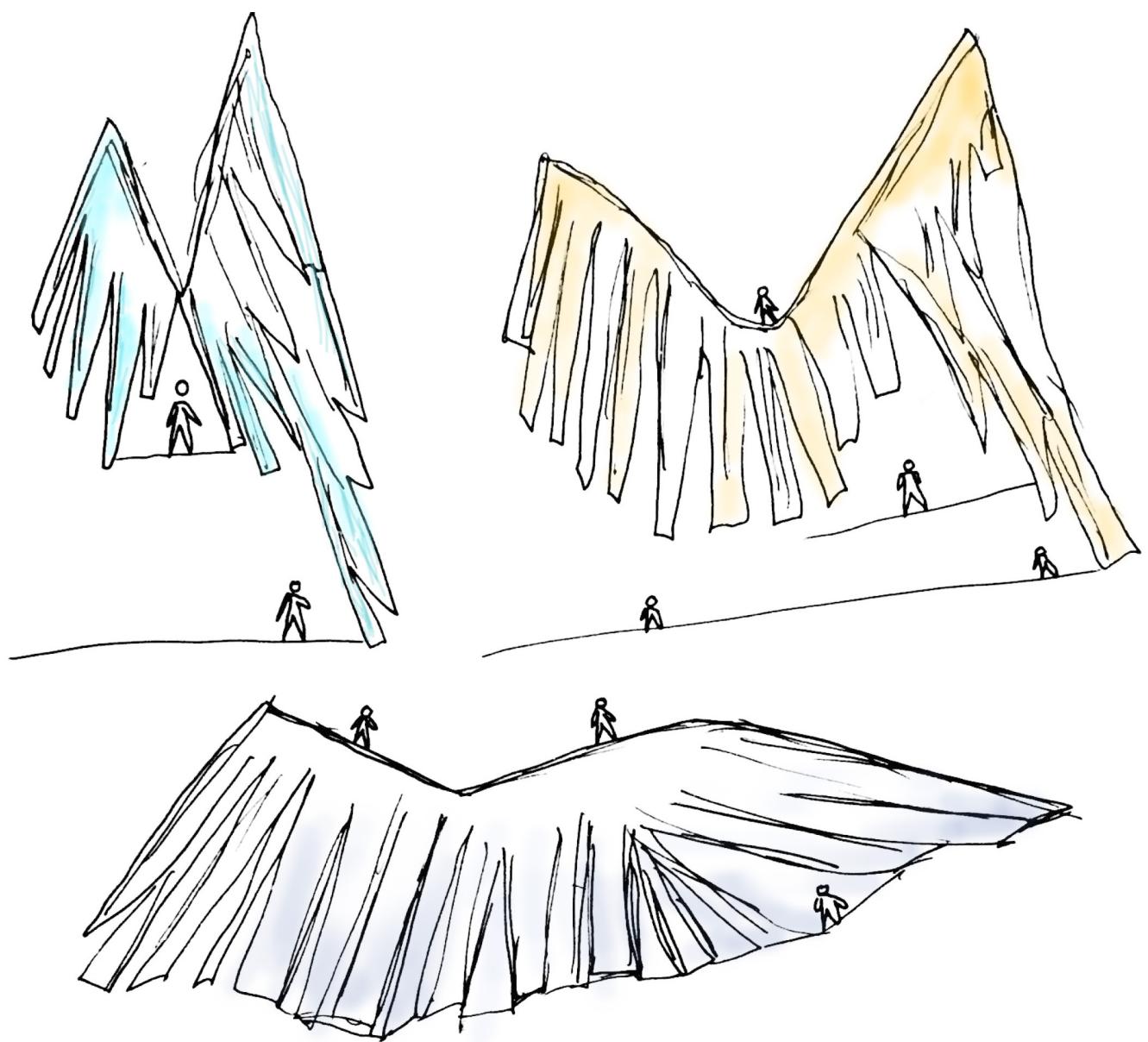


Figure:69
Concept
Drawing 1

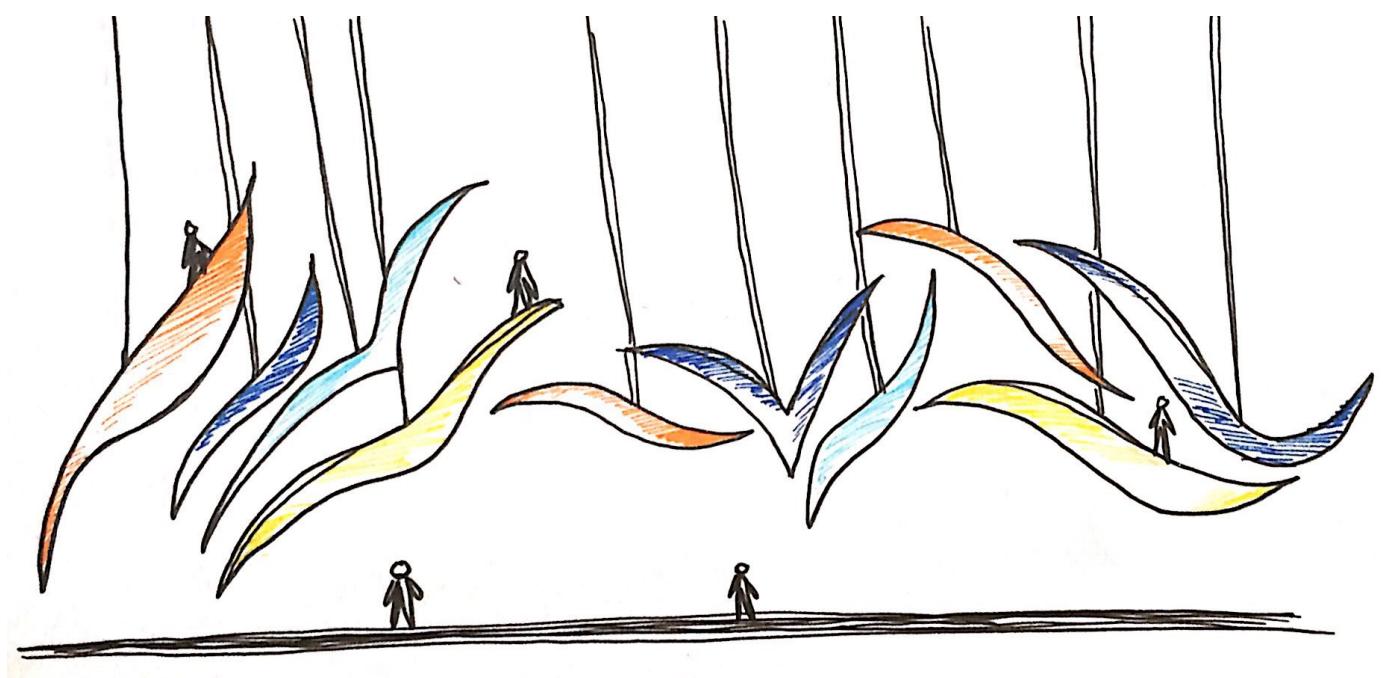


Figure:70
Concept
Drawing 2

A p p e n d i x

Word Count: 4,355 (excluding headings and labels)

Primary Research- Case Study (Page 37)

When carrying out primary research in the Royal Forces Recruitment Office, images were not allowed to be taken inside due to the sensitivity of the environment.

Primary Research- Survey (Page 34-35)

The primary research survey was carried out online and was completed by 60 participants. There were more females who completed the survey than males. Age range was covered accurately, and the only question skipped by 22 participants was question two.



Transcript from discussion with Royal Navy Staff

Nickname: Emily

Email: emily.hesketh@mail.bcu.ac.uk

Started at: 25th January 2018 at 10:52

Pre-Ticket Data

Hi, I just entered a life chat with Sophie, but unfortunately all the messages she sent have been erased possible to retrieve these messages?

Sophie

10:53: Hello again emily.

Sophie

10:53: I stated that the Armed Forces Careers Office deal with the whole joining process.

Sophie

10:54: They also have careers advisers who give guidance on roles.

Sophie

10:54: Naval Service Recruitment Test (NSRT)

you'll be tested on general reasoning, verbal ability, numeracy and mechanical comprehension
Interview

A formal interview to talk through your suitability for the role

Medical and eye tests

These are quite comprehensive and must be completed by one of our Ministry of Defence-approved doctors

Pre-Joining Fitness Test (PJFT)

This involves completing a 2.4km run on a treadmill within a certain time, at a fitness centre near you

Pre-Royal Navy Course (PRNC)

This four-day induction to life in the Royal Navy is a pass or fail course

Start training

Once you've passed a Security Check, you'll be offered a place at HMS Raleigh

Sophie

10:54: Here is a joining process for a rating.

Sophie

10:54: They also give guidance on each stage of the joining process.

Emily

10:56: Hi again Sophie thank you for responding to my message, I really appreciate it. In regards to the recruitment does this take place in the Birmingham office or do individuals go elsewhere for this?

Sophie

10:57: that takes place within the office yes.

Emily

10:58: Do you simply get individuals passing by and dropping in, or do you have to book to visit?

Survey Data

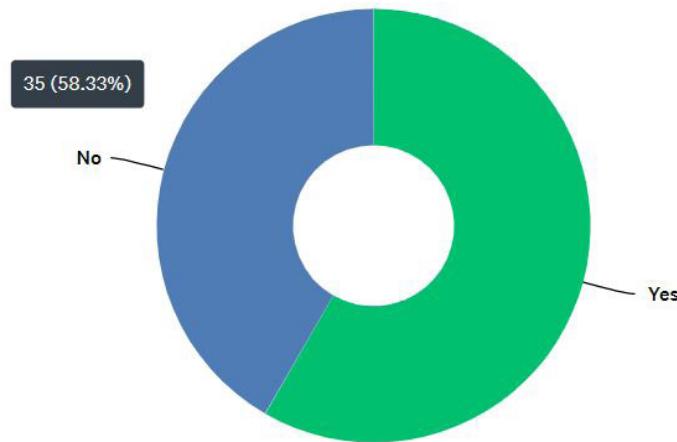
Q1

Customize

Export ▾

Have you ever suffered from anxiety or nerves whilst on a flight?

Answered: 60 Skipped: 0



ANSWER CHOICES

RESPONSES

▼ Yes	58.33%	35
▼ No	41.67%	25
TOTAL		60

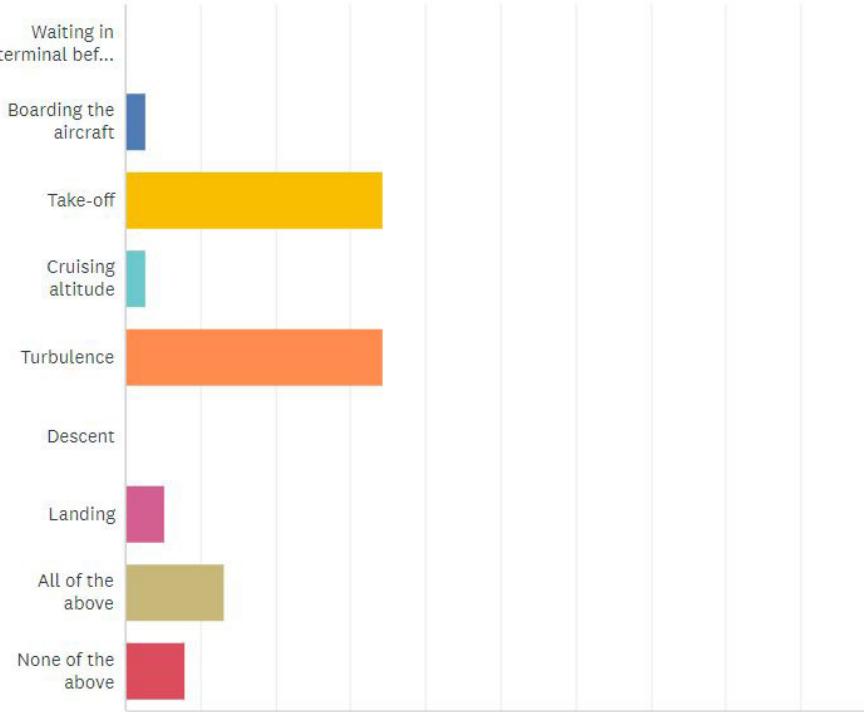
Q2

Customize

Export ▾

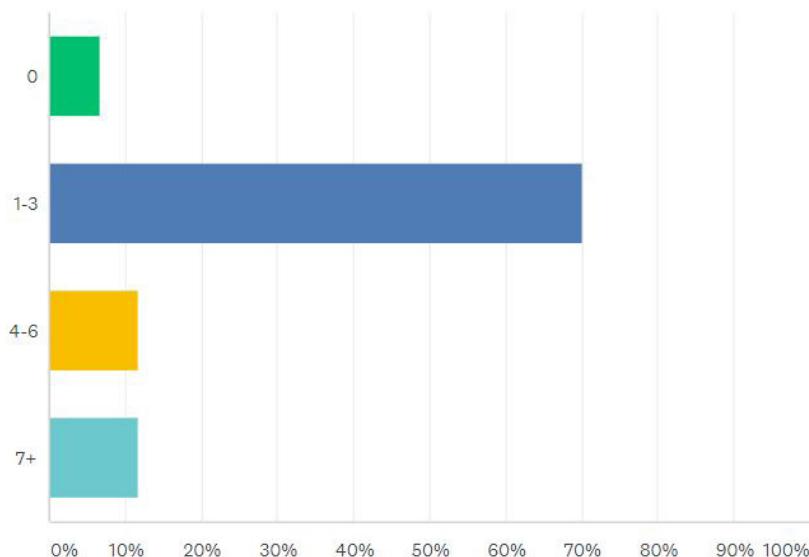
If answered yes in the previous question, which part of flying do you find most destressing?

Answered: 38 Skipped: 22



On average how many times do you fly a year?

Answered: 60 Skipped: 0



ANSWER CHOICES

RESPONSES

▼ 0	6.67%	4
▼ 1-3	70.00%	42
▼ 4-6	11.67%	7

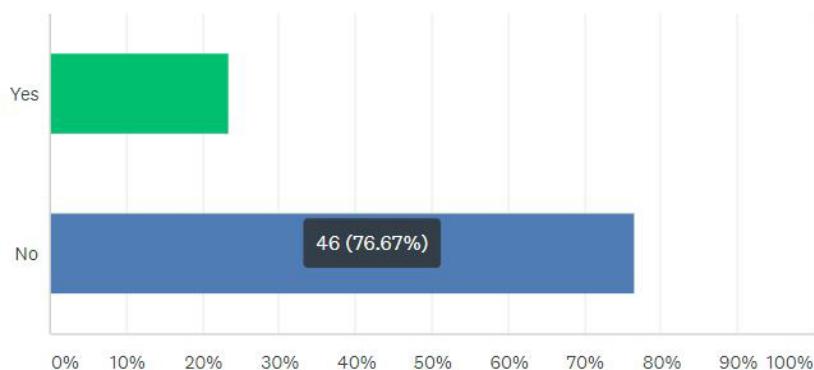
Q4

Customize

Export ▾

Has anxiety about flying ever put you off from booking a flight?

Answered: 60 Skipped: 0



ANSWER CHOICES

RESPONSES

▼ Yes	23.33%	14
▼ No	76.67%	46
TOTAL	60	

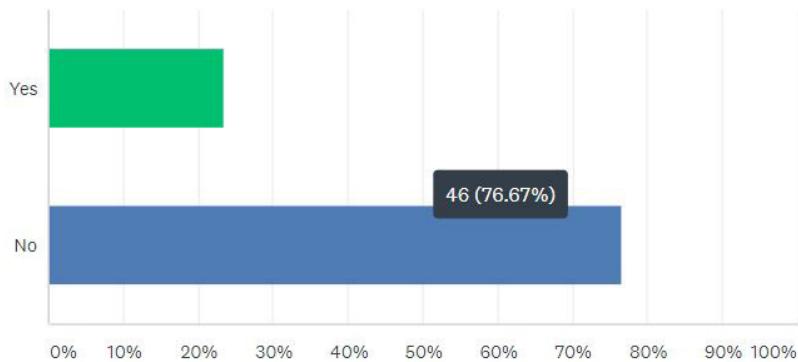
Q5

Customize

Export ▾

Would you ever consider seeking help for anxiety related to flying?

Answered: 60 Skipped: 0



ANSWER CHOICES

RESPONSES

▼ Yes

23.33%

14

▼ No

76.67%

46

TOTAL

60

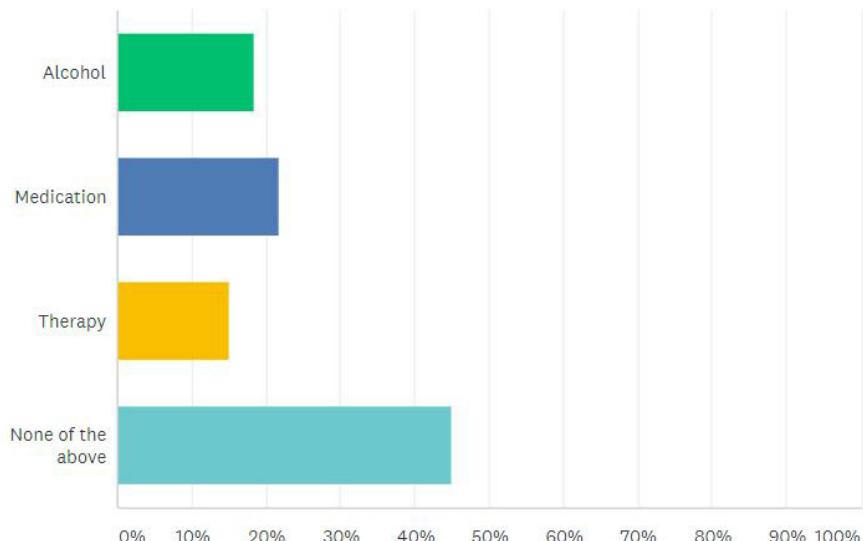
Q6

Customize

Export ▾

What coping mechanism do you/would you use if you were anxious about flying and you felt you needed additional support?

Answered: 60 Skipped: 0



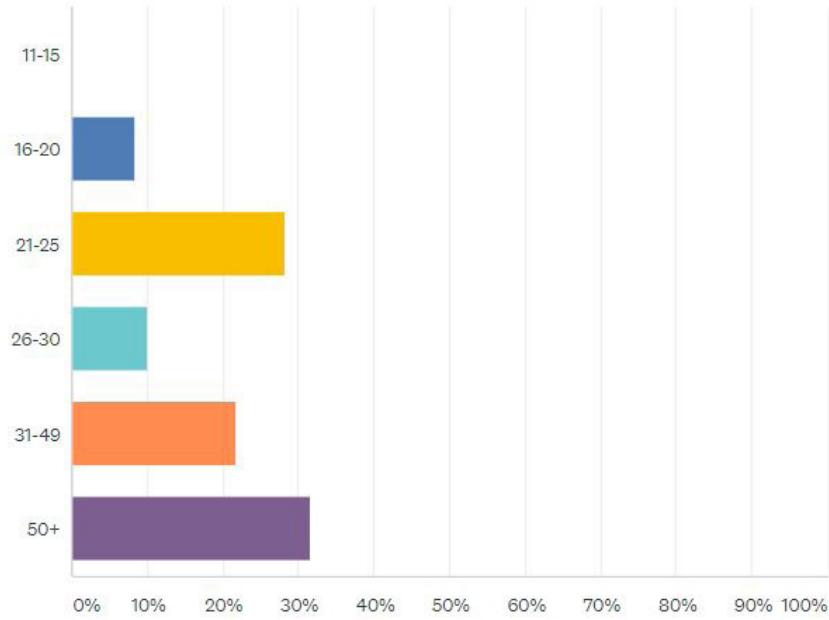
Q7

Customize

Export ▾

What age are you?

Answered: 60 Skipped: 0



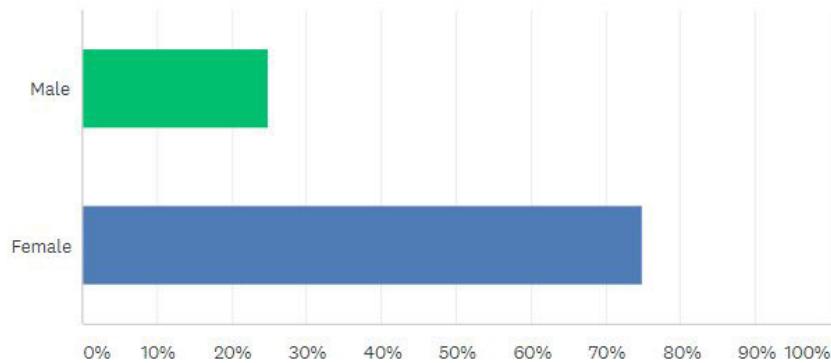
Q8

Customize

Export ▾

What gender are you?

Answered: 60 Skipped: 0



Email Correspondents With Hypnotherapist

2/1/2018

Mail – Emily.Hesketh@mail.bcu.ac.uk

Re: Research regarding Fear of Flying

Jane Webb <jane@mylearthoughts.com>

Thu 01/02/2018 07:28

To: Emily Hesketh <Emily.Hesketh@mail.bcu.ac.uk>;

Hi Emily

EMDR stands for Eye Movement Desensitization and Reprocessing and is an amazingly fast and effective technique which utilises Eye Movement to help flatten the emotions linked to memories or feelings. It is well known for its benefits when used for PTSD, with soldiers. However it is excellent for dealing with any kind of trauma, from accidents to sexual abuse and violence. There are 2 main theories on how it works.

1 It is related to the R.E.M. sleep state and the way the brain reprocesses Thoughts and feelings while we sleep.

2 It Works because the Eye Movement moves thoughts and feelings and between the left and right side of the brain, changing the level of importance of the thoughts within the subconscious and flattening the emotional link.

The is a lot of evidence showing it works but no proof of why.

Visualisation works because the subconscious mind cannot distinguish between reality and imagination. So when you vividly imagine doing something, your subconscious mind then believes it has done this before in this way. As you visualise, the brain fires neurons to install the new pattern, the more you repeat the visualisation and repeatedly fire the neurons the stronger the pattern becomes. So then when the situation is met in reality the subconscious checks for how it is supposed to behave and finds this new pattern that it believes works and uses it. The old behaviour is changed.

Hope this helps

Many thanks

Jane

On Thu, 18 Jan 2018 at 08:41, Emily Hesketh <Emily.Hesketh@mail.bcu.ac.uk> wrote:

Hi Jane,

Thank you very much for responding to my email. It is really helpful to get an insight from an expert in industry.

Could you just tell me a little more about what EMDR and visualisation methods involve, and why you think these methods are more successful compared to other forms of treatment.

Thank you for your time.

Emily Hesketh

From: Jane Webb <jane@mylearthoughts.com>

Sent: 16 January 2018 17:53:37

To: Emily Hesketh

Subject: Re: Research regarding Fear of Flying

Hello Emily

I do not collect statistics on success rates, not all clients stay in touch. I can tell you that my most recent 2 clients were 100% successful since 1 referred another client and the other sent me a text from the plane. I use different techniques based on my evaluation at the beginning of the session. For 1 I used EMDR followed by visualising a successful flight for the other I used a fast rewind technique and visualisation. I don't pass on any clients details so am unable to put you in direct contact with clients.

Many thanks

Jane Webb

On Mon, 15 Jan 2018 at 13:53, Emily Hesketh <Emily.Hesketh@mail.bcu.ac.uk> wrote:

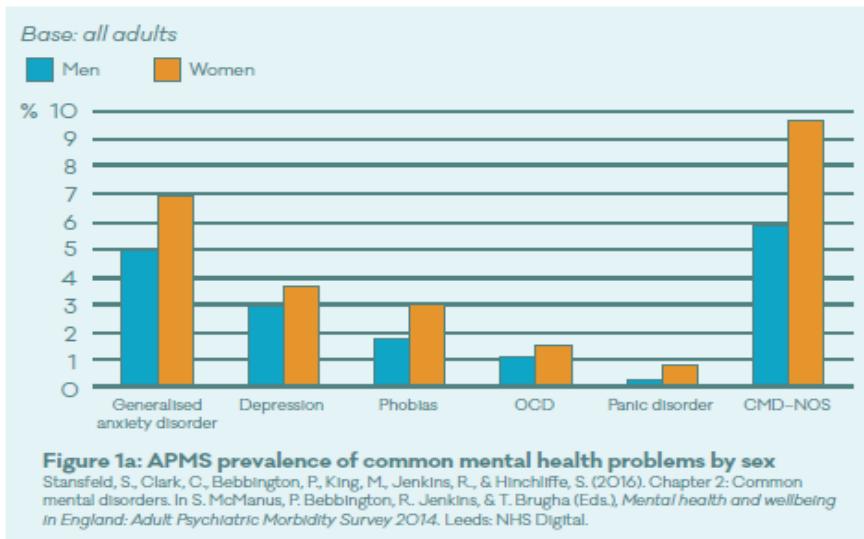
Hi, my name is Emily Hesketh and I am a final year student at Birmingham City University studying Interior Design.

Graphs Taken From Mental Health Foundation (2016)

Type of common mental health condition	Percentage receiving treatment
Depression	59.4%
OCD	52.1%
Phobias	51.6%
GAD	48.2%
CMD-NOS	24.7%
Panic disorder	20.9%

Table 4a: Treatment uptake by type of common mental health condition

Lubian, K., Weich, S., Stansfeld, S., Bebbington, P., Brugha, T., Spiers, N., ... Cooper, C. (2016). Chapter 3: Mental health treatment and services. In S. McManus, P. Bebbington, R. Jenkins, & T. Brugha (Eds.), *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital.



Mental health condition	2007 (%)	2014 (%)
GAD	4.4	5.9
Depression	2.3	3.3
Phobias	1.4	2.4
OCD	1.1	1.3
Panic disorder	1.1	0.6
CMD-NOS	9.0	7.8

Table 1b: Prevalence of common mental health problems (adults 16+)

Stansfeld, S., Clark, C., Bebbington, P., King, M., Jenkins, R., & Hinchliffe, S. (2016). Chapter 2: Common mental disorders. In S. McManus, P. Bebbington, R. Jenkins, & T. Brugha (Eds.), *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital.

B i b l i o g r a p h y

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[Accessed 10 January 2018].

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Johnson.Z,(2016) 'Ride the Emirates Air Line cable car with this 360° video', The Telegraph Accessed: 17/01/2018 [Online] Available at: <http://www.telegraph.co.uk/travel/destinations/europe/united-kingdom/england/london/articles/ride-the-emirates-air-line-with-360-degree-video/>

Murray.D (2016) 'Call for Thames Emirates Air Line cable car to be part of transport system and not 'tourist attraction'" Evening Standard, Accessed: 17/01/2018 [Online] Available at: <https://www.standard.co.uk/news/transport/call-for-thames-emirates-air-line-cable-car-to-be-part-of-transport-system-not-tourist-attraction-a3330096.html>

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