

# Risk assessment for Regional Space School trip Houston Texas, USA 14<sup>th</sup>-21<sup>st</sup> October 2018

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**School:** Lockerbie Academy

**Education Authority:** Dumfries and Galloway Council

**Directorate:** E.C.S

**Destination:** Houston, Texas, USA  
(Lockerbie Pupil)

**Number of pupils:** 33 (7 x Sanquhar, 3 x DHS, 5 x Moffat Academy, 17 Lockerbie Academy + 1 ET former

**Number of staff:** 3    **Staff names:** Mrs Hargreaves, Mr Hargreaves, Mr Ormrod.

**Other Adults:** ViE Representatives.

## Description:

|   |  |
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| <b>Likelihood:</b> The chance of the hazard or event actually occurring |  |
| High (H):   | Harm is certain or near certain to occur |
| Medium (M):   | Harm will often occur                    |
| Low (L):  | Harm will seldom occur                   |

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| <b>Severity:</b> The extent of the harm (injury or ill health) should the hazard occur. |  |
| High (H):   | Death or major injury (as defined by RIDDOR)   |
| Medium (M):   | H day injury or illness (as defined by RIDDOR) |
| Low (L):  | All other injuries or illnesses                |

| <b>Risk Rating:</b> Once the likelihood and severity have been determined, the risk can be calculated below. |                   |      |        |
|--|-------------------|------|--------|
|  | <i>Likelihood</i> |      |        |
| <i>Severity</i>  | H                 | M    | L      |
| H  | High              | High | Medium |
| M  | High              | High | Medium |
| L  | Low               | Low  | Low    |

| <b>HAZARD</b>   | <b>L</b> | <b>S</b> | <b>R</b> | <b>PRECAUTIONS AND CONTROL MEASURE</b>   |
|---|----------|----------|----------|--|
| <b>General Comments not requiring RA</b>                              |          |          |          | <ul style="list-style-type: none"> <li>• Students and staff should have a routine for charging phones so that each day students are carrying fully charged phones.</li> <li>• Group leader should add note to FB and mrsphysics on arrival and on successful return.</li> </ul>  |
| All students to meet up at 0:50am for the 1:30am departure.           |          |          |          | <ul style="list-style-type: none"> <li>• One group are being picked up at Abington, some going by car as they have car sickness and anxiety.</li> <li>• Route to be M74/M74 extension/M8 to Glasgow Airport</li> <li>• Phone number of the coach driver to be taken prior to the journey to check he arrives on time.</li> <li>• Check procedure prior to leaving how to accommodate students who might not be up to travelling on the day.</li> </ul>   |
| Airport check-in and transfer   |          |          |          | <ul style="list-style-type: none"> <li>• All passports checked and collected prior to departure and all documentation checked. All students to have ESTA forms, letters of duty of care, luggage labels. Staff to check these prior to departure.</li> <li>• 1 student with US passport. He usually travels in and out of UK on UK passport and in and out of US on US passport.</li> <li>• 1 Teacher to go through boarding first and 1 last so that students are not left alone on one side of check-in.</li> <li>• Missed connections- all students stay together and not accept being split up.</li> </ul> |
| Safety Briefing   |          |          |          | <ul style="list-style-type: none"> <li>• There will be a safety briefing on Day 1 at 17:00. This will explain all the safety to each students</li> </ul>   |
| Accommodation at Marriott Hotel, Springhill Suite, Webster, Texas USA |          |          |          | <ul style="list-style-type: none"> <li>• On arrival group will be given an introductory tour, safety measures highlighted and fire drill demonstrated. Adults supervise all activities. Group to strictly follow all safety instructions. Sensible behaviour from pupils. Unruly behaviour will not be tolerated.</li> </ul>   |

| <b>Travel</b>  |   |   |   |   |
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| Party becoming split up.                                     | L | M | M | <ul style="list-style-type: none"> <li>• Check all staff and pupils are present at the start and end of each journey.</li> <li>• Regularly head count members of the group.</li> <li>• No boarding or alighting unless the responsible adult can see that everyone will follow.</li> <li>• If a group is delayed one member of staff, with mobile phone, goes to find missing person, others stay with remainder of party.</li> <li>• All students to have card with details of group, hotel, and staff members with contact details</li> </ul> |
| Injury through travel accident                               | L | H | M | <ul style="list-style-type: none"> <li>• Pupils to sit if spaces are available.</li> <li>• Students and staff must remain belted in to all forms of transport if seatbelts are available.</li> <li>• On aircraft seatbelts must be worn EVEN IF the seatbelt sign is switched off.</li> </ul>   |
| Trips/falls whilst boarding or alighting from transport      | L | M | M | <ul style="list-style-type: none"> <li>• Always walk, do not run.</li> <li>• Wear sensible footwear.</li> <li>• If travelling upstairs on a bus you must use the grab rails when going up and down the stairs. You will have to use the stairs whilst the coach is moving so hold on tight to rails. The stairs are steep.</li> <li>• Do not attempt to run up and down the stairs.</li> </ul>  |
| Injury through prolonged sitting on aircraft                 | L | M | M | <ul style="list-style-type: none"> <li>• Students walk once around the plane every 2 hours during the flight to keep up circulation and regularly move legs and feet.</li> </ul>  |
| Lost luggage   | L | L | L | <ul style="list-style-type: none"> <li>• Students to carry spare medication and change of clothes in hand luggage. Lists of prescriptions etc to be kept in hand luggage or with staff.</li> </ul>  |
| Getting cold/hot, lack of food and drink, stress and anxiety | L | L | L | <ul style="list-style-type: none"> <li>• Staff to ensure pupils are appropriately dressed, have sufficient meal, toilet and rest stops, and are considerate of others.</li> </ul>   |
| <b>General Risks</b>   |   |   |   |   |
| Mugging/pick-pockets   | L | H | H | <ul style="list-style-type: none"> <li>• Minimize the risk by keeping alert but keeping bags etc out of sight.</li> <li>• Carry money securely in appropriate bag/money belt.</li> <li>• If someone attempts to take your bag or property, hand it over- it can be</li> </ul>   |

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|                        |   |   |   | <p>replaced, you cannot.</p> <ul style="list-style-type: none"> <li>• Be a good witness and try to get as much detail as possible.</li> <li>• Do not use expensive mobiles etc in full view of others.</li> <li>• Limit the amount of money held at one time. Lock the rest in the hotel safe or leave with staff member.</li> </ul>   |
|                        |   |   |   |  |
| Swimming in hotel pool | L | M | M | <ul style="list-style-type: none"> <li>• Kenny Wright has advised that swimming in the pool is a safe activity. On arrival KJ and JA Hargreaves, A Ormrod will risk assess the pool, checking for trip, slip hazards and safe points entry and exit.</li> <li>• The pool is not deep. No students to dive into the pool. All students to be told of this.</li> <li>• Swimming not to be undertaken by any student unless adult (staff member) supervision provided.</li> <li>• No student to go swimming on own, must go in twos, or in preference 3 or more.</li> <li>• Students should be warned of stranger danger.</li> </ul>                          |
| Day 1 Dinner on Own    | L | L | L | <ul style="list-style-type: none"> <li>• Staff will accompany students to Filling Station or Steak n Shake near to hotel.</li> </ul>   |
| Homesickness           | M | L | M | <ul style="list-style-type: none"> <li>• Monitor students carefully for signs of homesickness and stress. Ensure friend remains with them, give additional support from an adult.</li> </ul>   |
| Food                   | L | M | M | <p>One student has a nut allergy. All food should be checked to see if it contains nuts.</p> <p>Students should be aware of food preparation and should check servers are washing hands and maintaining good hygiene</p>   |
| Stranger danger        | L | H | H | <ul style="list-style-type: none"> <li>• Pupils stay in groups of 3 or more. Pupils never to go on their own.</li> <li>• Staff to stay alert and challenge “strangers” found on site as to their reasons for being there.</li> <li>• External doors and windows should be checked as secure against intrusion.</li> <li>• Students should be checked into rooms at “Lights out” and staff should check they have locked their doors.</li> <li>• Young people should know how to contact staff at night.</li> <li>• Students must remember to lock their doors and take the key with them if they go to other places in the accommodation block.</li> </ul> |

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| People trying to enter the room uninvited | M | L | M | <ul style="list-style-type: none"> <li>• Students to be shown how to look the door and adults to check that doors are locked.</li> <li>• Staff to have a list of who is staying in which room.</li> <li>• Any person trying to enter a students' room should be directed to Mrs Hargreaves' Room or other adult.</li> <li>• Students must not open the door unless they know who is knocking.</li> <li>• Students will be checked into their rooms at "lights out".(10pm)</li> <li>• Staff will check that students have locked their doors and students should be aware of where the staff rooms are located and how to get to them should they need them throughout the night</li> </ul> |
| Accidents and emergencies                 | L | M | M | <ul style="list-style-type: none"> <li>• Staff to be informed of duty manager and first aid and emergency procedures for the accommodation</li> <li>• Staff will know their responsibilities and when they are on duty</li> <li>• Staff will not be under the influence of alcohol or drugs so that their ability to recognise hazards or respond to these is unimpaired,</li> </ul>   |
| Fire                                      | L | H | H | <ul style="list-style-type: none"> <li>• Group leader will conduct an on-site visual inspection of fire escapes, alarms and equipment.</li> <li>• Students should not be charging phones near to their beds, or have access to candles or other highly flammable equipment.</li> </ul>   |
| Hygiene                                   | L | L | L | <ul style="list-style-type: none"> <li>• Staff will inspect and monitor washing facilities, lighting, heating ventilation and catering. Group will be briefed on washing hands regularly, especially before meals.</li> </ul>  |
| Night time tendencies                     | L | L | L | <ul style="list-style-type: none"> <li>• Parents should brief staff prior to the visit about medical conditions, sleepwalking etc. Suitable supervision should be arranged to meet needs of pupils</li> </ul>  |
| Traffic driving on the right              | L | H | M | <ul style="list-style-type: none"> <li>• Students to be reminded on a daily basis that traffic will be coming from the left, not the right.</li> <li>• Students to be warned about the "turn right on red" rules in the U.S.</li> </ul>  |
| Contact with animals                      | L | L | L | <ul style="list-style-type: none"> <li>• Tell students not to make contact with dogs or other animals</li> </ul>   |
| Becoming lost or separated from group     | L | M | M | <ul style="list-style-type: none"> <li>• Count heads. All members of the party to carry emergency contact details.</li> <li>• Guidelines given to children about what to do if separated</li> <li>• Ensure participants let leader know if they are leaving the group early</li> <li>• Clear boundaries for activities</li> </ul>  |

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|  |   |   |   | <ul style="list-style-type: none"> <li>• Ensure good behaviour</li> <li>• In the event of unacceptable behaviour, consider shortening sessions</li> <li>• Leader at front plus back marker when moving between activities</li> </ul>   |
| Excessive exposure to sun/rain/wind, getting hot/cold/hungry/thirsty | L | M | M | Wear appropriate clothing, cover heads with sunhats and keep suntan cream on if required. Students to keep hydrated with plenty of water. Students have been told to carry water, and to have sunhats, suncream and raincoats. Teacher to carry emergency fund.  |
| General care   | L | H | M | <ul style="list-style-type: none"> <li>• Staff to carry a mobile phone and shared with students and staff.</li> <li>• Group leader must have list of all pupils on the trip with their emergency contacts</li> <li>• Ratio of adults to children fit for purpose.</li> <li>• Students to go around in threes (as mentioned at Parents' Evening)</li> <li>• Route taken should be appropriate for age and ability of group</li> <li>• Ensure group behaviour and supervision is acceptable and appropriate.</li> <li>• Plan journey to avoid fast roads or dangerous junctions.</li> <li>• Students should have a briefing about travelling area.</li> <li>• Supervision should be appropriate to age and stage.</li> <li>• Students should know their group leader for each excursion</li> <li>• Students to carry identification of contact phone number and address and phone of the Springhill Suite Houston and Johnson Space Center.</li> <li>• Large groups will be split into smaller groups with an identified adult leader. Leaders should know who is in their group and be able to contact them.</li> <li>• Mobile phones may be carried but maybe out of range so should be assumed to be an additional layer of cover.</li> </ul> |

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| Kemah Boardwalk and Main Event Activites | L | H | M | <ul style="list-style-type: none"> <li>• Care should be taken when interacting with ride restraints, belt clips, doors etc., as fingers may be trapped in mechanisms.</li> <li>• Always follow instructions from Operators and Attendants.</li> <li>• Children must be supervised where necessary.</li> <li>• Ride participation Verbal instruction from operators and attendants, and information posted on primary safety instruction signs must be followed at all times.</li> <li>• Check Employee/guest interaction Check employees who interact with guests carry identification cards while on duty and wear name badges.</li> <li>• All rides and attractions have signage indicating safety guidelines and guidance. These should be adhered to at all times.</li> <li>• Hands-on contact with animal cages/enclosures should be restricted and guests should wash hands in wash areas provided if contact occurs.</li> <li>• Handrails are provided where necessary and fencing/signage is installed to prevent unauthorised access to areas where fall hazards may exist. Any ride evacuations at height will be controlled and carried out by designated competent staff using appropriate fall arrest/restraint safety/recovery equipment for both themselves and visitors. Check rides are installed with evacuation staircases/access at all high level points where the ride may stop, or access equipment .</li> </ul> |
| <b>Shopping</b>                          |   |   |   |   |
| Buying inappropriate items               | L | M | M | <ul style="list-style-type: none"> <li>• Students will be informed of what can and cannot be brought through customs. No inappropriate materials must be purchased by students.</li> </ul>  |
| Students become lost or disorientated    | L | M | M | <ul style="list-style-type: none"> <li>• Students should only be able to shop within a reasonable specified area, related to age and stage. If shops are outwith this area an adult must accompany them and be able to return within the agreed time. Mobiles should be carried by staff and students</li> </ul>  |

|                                    |   |   |   |  |
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| Students return late from shopping | L | M | M | <ul style="list-style-type: none"> <li>• Time to meet up agreed at the start of the shopping trip. If possible students should set alarms 10 mins before meet up time</li> </ul>   |
| Student becomes ill                | L | M | M | <ul style="list-style-type: none"> <li>• Students to remain in groups of 3 minimum. One to stay with ill student, the other to seek help.</li> </ul>   |
| Student has social difficulties    | L | L | L | <ul style="list-style-type: none"> <li>• Students to be briefed on the importance of incorporating all students into the group and ensuring all students have an opportunity to go to the appropriate shops they would like. If possible students with similar interests and shopping requirements should be grouped together for shopping.</li> </ul> |

Pupils and parents have been instructed about the code of conduct of the pupils whilst on the trip. Pupils will not carry or partake of alcohol or drugs (including cigarettes) or carry knives or other weapons. The pupils will observe the rules for travelling agreed beforehand. Medical forms are up to date. Pupils will obey staff instructions at all times including keeping to the agreed time schedules.

Assessor: **Mrs Hargreaves /Mr Hargreaves**

Signature: \_\_\_\_\_

Date: October 2018

Manager: **M. Downie**

Signature: \_\_\_\_\_

Date: October 2018



## D&G Regional Space School / STEM Mission to Mars / Springhill Suites, Houston

|                |        |  |
|----------------|--------|--|
| <b>DAY ONE</b> | 03:05  | Check-in at Glasgow International Airport for KLM Royal Dutch Airlines Flight # 1470 |
| 14-Oct-18      | 06:05  | Departure of KLM Royal Dutch Airlines Flight # 1470 for Amsterdam Schiphol           |
| Sun            | 08:45  | Arrive Amsterdam   |
|                | 09:50  | Departure of KLM Royal Dutch Airlines Flight # 661 for Houston, Texas                |
|                | 13:10  | Arrive George Bush Houston Intercontinental Airport; Houston, Texas                  |
|                | <----> | Gather luggage & prepare for departure   |
|                | 14:10  | Transfer to Springhill Suites NASA/Webster   |
|                | 15:10  | Arrive at Springhill Suites, meet your Ambassador and check-in                       |
|                | 17:00  | Visions Welcome & Safety Meeting   |
|                | <----> | Dinner on own  |

|                |               |   |
|----------------|---------------|---|
| <b>DAY TWO</b> | 07:00         | Breakfast at Hotel  |
| 15-Oct-18      | 07:45         | Transfer to Johnson Space Center                                    |
| Mon            | 08:00         | Check-in at Space Center Houston                                    |
|                | 08:10         | Space Center Welcome  |
|                | 08:30         | <b>Johnson Space Center Tram Tour</b>                               |
|                | 10:00         | <b>Room Orientation Binder</b>                                      |
|                | 10:30         | <b>Rocketry Overview</b>  |
|                | 11:00         | <b>Lunch at NASA</b>  |
|                | 11:30         | <b>Rocketry Build</b>   |
|                | 14:15         | <b>Mars Habitat &amp; Planet Pioneers Research for Mars Habitat</b> |
|                | 15:15         | <b>Swing Test &amp; Safety</b>                                      |
|                | 16:00         | <b>Debrief &amp; Dismiss</b>  |
|                | 16:00 - 17:00 | Free time in Space Center   |
|                | 17:00         | Transfer to hotel   |
|                | 19:00         | <b>Pizza Night at Hotel in the Orion Room</b>                       |

## D&G Regional Space School / STEM Mission to Mars / Springhill Suites, Houston

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| <b>DAY THREE</b> | 07:00       | Breakfast at Hotel   |
| 16-Oct-18        | 07:45       | Transfer to Johnson Space Center                             |
| Tues             | 08:00       | Check-in at Space center Houston                             |
|                  | 08:15       | <b>Rocket Safety &amp; Launch</b>                            |
|                  | 09:15       | <b>Rocket Park Tour</b>                                      |
|                  | 09:45       | <b>Habitat Overview</b>                                      |
|                  | 10:30       | <b>(Begin work on) Martian Habitat Design &amp; Build</b>    |
|                  | 11:00       | Lunch at NASA  |
|                  | 11:30       | <b>(Continue work on) Martian Habitat Design &amp; Build</b> |
|                  | 15:00       | <b>Habitat Presentations</b>                                 |
|                  | 16:00       | <b>Debrief &amp; Dismiss</b>                                 |
|                  | 16:15-17:00 | Free time in Space Center                                    |
|                  | 17:00       | Walk to Luby's   |
|                  | 17:15       | <b>Dinner at Luby's</b>                                      |
|                  | 18:15       | Transfer to Cinemark 18 for Movie Night                      |
|                  | <---->      | <b>Movies at Cinemark 18</b>                                 |
|                  | <---->      | Walk to hotel  |
| <b>DAY FOUR</b>  | 07:00       | Breakfast at Hotel   |
| 17-Oct-18        | 07:45       | Transfer to Johnson Space Center                             |
| Wed              | 08:00       | Check-in at Space Center                                     |
|                  | 08:15       | <b>Guest Speaker in Mission Briefing Center</b>              |
|                  | 09:00       | <b>VEX Robotics Overview</b>                                 |
|                  | 09:30       | <b>(Begin work on) VEX End Defector Build Challenge</b>      |
|                  | 11:00       | Lunch at NASA  |
|                  | 11:30       | <b>(Continue work on) VEX End Effector Build</b>             |
|                  | 12:00       | <b>Coding Overview</b>                                       |
|                  | 12:30       | <b>End Effector Build Coding &amp; Competition</b>           |
|                  | 15:00       | <b>Mars Yard End Effector Competition</b>                    |
|                  | 16:00       | Debrief & dismiss  |
|                  | 16:15       | Transfer to hotel  |

## D&G Regional Space School / STEM Mission to Mars / Springhill Suites, Houston

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|                 | 17:15       | Transfer to Fuddruckers 2040 NASA Road 1, Houston                      |
|                 | 17:30       | <b>Dinner at Fuddruckers Burgers</b>                                   |
|                 | 18:30       | Transfer to Baybrook Mall  |
|                 | 18:45-21:00 | <b>Free Time at Baybrook Mall</b>                                      |
|                 | 21:00       | Transfer to hotel  |
| <b>DAY FIVE</b> | 07:00       | Breakfast at Hotel   |
| 18-Oct-18       | 07:45       | Transfer to Johnson Space Center                                       |
| Thurs           | 08:00       | Check in at Space Center   |
|                 | 08:15       | <b>Thermal Tile &amp; Cryogenics Challenge</b>                         |
|                 | 09:15       | <b>Communication Tower</b>   |
|                 | 09:45       | <b>Thermal Tile &amp; Cryogenics Testing</b>                           |
|                 | 11:00       | Lunch at NASA  |
|                 | 11:30       | Depart Space Center for Neutral Buoyancy Lab                           |
|                 | 12:00       | <b>Neutral Buoyancy Lab Tour</b>                                       |
|                 | 13:15       | Transfer to Williams Pool  |
|                 | 13:45       | <b>Water Robotics Activity</b>   |
|                 | 15:45       | <b>Debrief &amp; Dismiss</b>   |
|                 | 16:00       | Transfer to hotel  |
|                 | 17:45       | Walk to Main Event   |
|                 | 18:00       | <b>Dinner &amp; Bowling (2 hrs) at Main Event Entertainment Center</b> |

## D&G Regional Space School / STEM Mission to Mars / Springhill Suites, Houston

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| <b>DAY SIX</b>  | 07:00       | Breakfast at Hotel  |
| 19-Oct-18   | 07:45       | Transfer to Johnson Space Center  |
| Fri   | 08:00       | <b>Starship Gallery Tour</b>  |
|   | 08:45       | <b>Prepare for Graduation Brunch</b>                                    |
|   | 09:00       | <b>Graduation Brunch Festivities Begin</b>                              |
|   | 10:00       | <b>NASA Astronaut Presentation</b>                                      |
|   | 11:00       | <b>Independence Plaza Tour</b>  |
|   | 12:00       | <b>Wrap-up Surveys; Graduation Concludes</b>                            |
|   | 13:30-16:00 | <b>Free Time to Explore Exhibits at Johnson Space Center</b>            |
|   | 16:30       | Transfer to the Kemah Boardwalk   |
|   | <--->       | <b>Free Time to Explore Kemah Boardwalk / Attractions are 'On Own'</b>  |
|   | 19:30       | <b>Dinner at Bubba Gump / Kemah Boardwalk</b>                           |
|   | 20:30       | Transfer to hotel   |
| <b>DAY SEVEN</b>  | 6:30 - 9:30 | Breakfast at Leisure  |
| 20-Oct-18   | 10:00       | Check-out of hotel  |
| Sat   | 10:30       | Load coach and prepare for departure                                    |
|   | 11:05       | Transfer to IAH- George Bush Intercontinental Airport for Departure     |
|   | 12:05       | Arrive at IAH & check in for KLM Royal Dutch Airlines flight 662        |
|   | 15:05       | Departure of KLM Royal Dutch Airlines Flight 662 for Amsterdam Schiphol |
| 21-Oct-18   | 07:15       | Arrive Amsterdam  |
|   | 12:05       | Departure of KLM Royal Dutch Airlines Flight 1475 for Glasgow           |
|   | 12:40       | Arrive Glasgow  |
| <p>Please note that the above itinerary is given as a sample for guidance. While Visions in Education will endeavour to adhere to this programme as closely as possible, it may be necessary for operational reasons to make modifications in resort.</p> <p><b>All flight times shown are local and may be subject to schedule changes at the discretion of the airline / motor coach.</b></p> |             |   |