Unit 7
Assignment 1

Aerospace

This leaflet will contain information about the different types of threats that an aerospace organization can face along with the consequences that these threats can cause.

This leaflet will contain information on 4 different types of threats that an aerospace company could face:
External threats

Internal threats

Physical threats

Social engineering threats

Example 1 - External Threats

For my first example I will be writing about the threat of people private information being stolen from the airport network by hackers. This information could be the credit card information that people flying on the plane used to purchase their flight with and if this information was compromised then the hackers would be able to spend money on all of their cards and get away with quite a lot before they are caught. In addition to this, the airports reputation would also be reduced and less people would use their services in the future resulting in to company possibly going bankrupt. The main reasons that this would be able to happen come down to weak system security in terms of access, logins and encryption.

Example 2 - Internal threats

Another example of a security threat that may happen within an aerospace organization would be the effect of bad staff and how they could abuse the system for their own sake. For example, in the airport the staff could abuse the powers that they have over the system to give places to their friends at a cheaper price as they could just add them to the system easily and get the profits from them to make money. If this happens then this could be quite bad as the airplane company could lose money as they are not getting full pay from all of their customers on the plane and this could eventually mean that the company could go bust or be forced to lay off employees. In addition to this the staff could also change some things about the system that are set in a very specific way and this could lead to a total system failure and could damage the reputation of the company for a while. The main way that this could be stopped would be to have different levels of user access for all the different staff in the company. This would limit the users to only have access to the system to the parts that are can use and are authorized to use.

Example 3 - Physical Threats

For this example, I will be writing about how physical threats can affect the aerospace industry and what consequences this could have. The main example of this would be the hijacking of the airplanes whilst they are in flight. For this treat to actually happen there are quite a number of things that need to go right so it is quite rare for it happen but if it does then it will be a very serious incident to happen. Another way that there could be a physical threat would be if people broke into the place where the servers were stored then they could steal certain information from the hard drives in the server and from this they

could get private information. This is a physical threat as the information is physically being taken from the servers rather than being taken through software. This type of physical attack does not happen often at all due to the fact that this type of attack requires a lot of preparation and can be very hard to pull off. With both of these attacks, if they are pulled off successfully then the effects can be devastating for one, many lives can be in danger and certain IT processes can be spoofed and fail, whilst with the other, a lot of confidential information can be lost. With this, many people could have their credit card information leaked and have unauthorized purchases made on their account that can financially ruin people.

Example 4 - Social Engineering threats

With this example the main way that a threat is generated is through use of many different people all doing a small task that totals up a large strain the system that can take it down temporally. The main way that this can happen through the use of a DOS or a DDOS attack on the system that the airport uses that people use to book their tickets. This would then create a situation where the airport would be unable to get customers to their flight and as such they would lose money and business, this can then be used to ransom the company for something and in most cases this is money. This can be quite a powerful attack technique due to the fact that the company will want to gain the ability to get access to their customers back and as such they will want to pay for this. This attack is called a DDOS attack and this stands for a Distributed Denial Of Service attack as it plans to cripple the ability for the server to service the people that need to use it. This is done by infecting many, many computers with a virus that at a certain time will send as much network traffic as it can to a certain server and this will take up all of the bandwidth to that server and as such it cannot serve the data that it needs to the people who need it. These types of attack can be from just one person and a machine all the way up to millions of computers around the world that have been infected.