1. In this case I would have the server central to the New York building somewhere on the second or third floor. This would be the main storage for the server. A back up of the server would be stored in the Houston location. This should all take care of the physical security.  For computer access the systems would have secure control methods with specific users that can get in and make certain changes to certain parts of the database. Each user should have their own identity instead of a shared account to keep track of who made what changes to the system. The system should also have a version log keeping track of all the changes made by users to the database. Lastly we would also need a security code and entrance to the actually data base itself. In todays modern age it seems like a two-step or three-step verification would be ideal. Something like a password and a local physical Bluetooth device to change the data. Maybe biometric if we have the budget for such verification.
2. For backup and recovery, the best plan is to have at least 3 copies of the data in different locations. The first copy can be in the New York build but must be in a separate room. This will allow for the fastest data transfer as we are dealing with local area network speeds at this point. The server can copy and changed data every time it is written and changed. This will allow for quick writing times for both and having a close backup in case of hardware failure. Both servers must be on UPS’s and have to have back up batteries that can last longer than the write cycle of the entire data base. The third backup should be in the Houston location and this one should take copies from the other two databases every hour or so. In the case that something happens to both the main servers, the Houston one should be able to recover the data with only an hour’s worth of changes lost. Lastly a fourth copy in a 3rd party server would also be a good idea in case the entire network for happy cruise ships collapsed and corrupted every server. This should at minimum be copied over every night.
3. In this case we can check changes with both the main server and its onsite backup. for someone to make a reservation or change any piece of data the main server checks if a spot is available, if it is it holds that's spots and conforms with the backup. When the back up agrees that spot is available it sends a message saying ok book it. If there are any discrepancies then the servers will return to the request that the spot is filled and cannot be booked at this time.