

RISK ANALYSIS MATRIX	
Installation site:	UNV (FAA Identifier)
Customer:	University Park Airport
Installation product:	EA infrastructure system for cargo demands through 2040

Risk ID #	System description area	Possible risk	Unmitigated: Worst Outcome	Un-mitigated consequence score			SRM controls	Mitigated Consequence Score			Worst outcome (mitigated)
				Likelihood	Severity	Risk grade		Likelihood	Severity	Risk Grade	
1.0	Power generation	Panel fire	Major asset loss	2	5	High	Fire Supression Systems	1	2	Low	Small fire
							Regular safety inspection of panels for fire hazards				
							Computerized early warning and shutdown system				
1.1		Solar Panel Toxicity	Not enough power for planes	2	4	Medium	Use alternate energy genetation methods when nessisary	1	4	Low	Price increase
1.2		Electrocution Hazard from solar panel	Death of a worker	2	5	Very High	Only have specific staff interact with the panels	1	5	Medium	Death of a worker
1.3		Area can't genetate power well	Not enough power for planes	2	5	High	Off site power when nessisary	2	4	Medium	Price increase
1.4		Power generation instability	Lack of sustainable power	2	3	Medium	Ensure grid-connected supply	1	2	Low	Temporary usage of other source of power
							Tune energy demands to grid availability				
2.1	Power distribution	Power outage	Planes cannot charge and airport must shut down	5	5	Very High	Back up charging system	1	5	Medium	Planes cant charge temporarilly
3.0	Charging	Battery fire	Total asset loss	2	5	High	Fire Suppression Systems	1	5	Medium	Localized fire
							Advanced battery management system				
							Charge only validated and healthy batteries				
3.1		Charger Failure	Throughput hindered	2	3	Medium	Proper charger maintenance	1	3	Low	Drastically reduced downtime
3.2		Connector incompatibility	Aircraft stuck at airport	2	4	Medium	Stargetic flight operations	1	4	Low	Aircraft stuck at airport
3.3		Worker injury	Worker death	2	5	Very High	Established process and safety proceeders	1	5	Medium	less likelihood
3.4		Incomplete charge before scheduled takeoff	Flight delays	4	1	Low	Advanced scheduling with margin for error	1	1	Low	slight delays
4.0	Solution Marketing	Lack of government support	Insufficient funding	2	5	High	Find outside funding	2	4	Medium	New funding might not be sufficient
4.1		Biofuel becomes standard	Soluton isnt as useful	2	4	Medium	Use less panels to just provide power to airport	2	2	Low	Buniness model is limited
4.2		Lack of market interest	Solution Failure	3	5	High	Market solution elements to other industries	3	2	Medium	Finding customers is difficult