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**SPECIFIC OPERATIONS RISK ASSESSMENTS  
(SORA) COURSE APPLIED TO UNMANNED AERIAL  
VEHICLES**



# CHAPTER I: INTRODUCTION TO BASIC CONCEPTS



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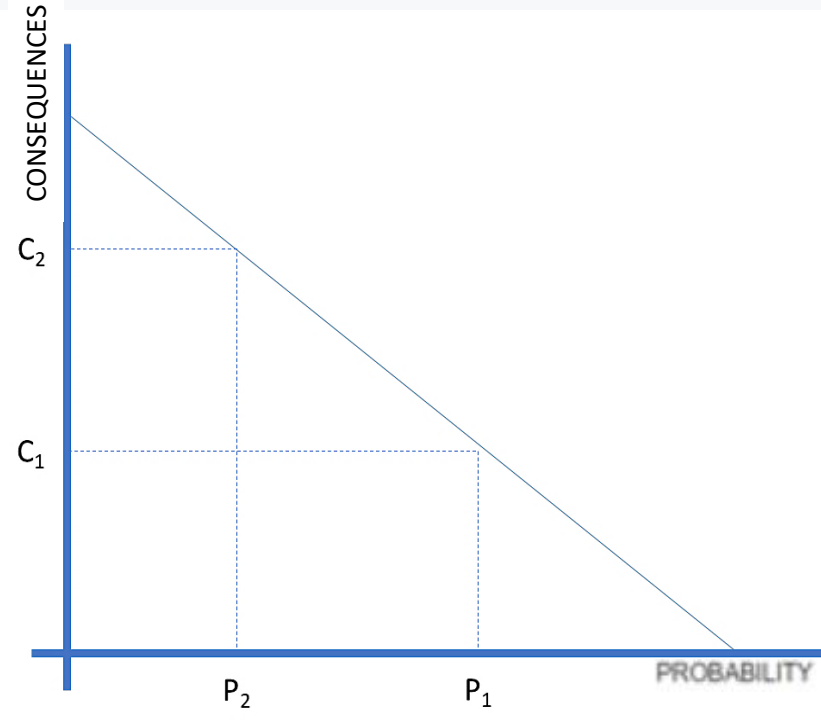
# PROBABILITY AND CONSEQUENCES



$$R = P \times C \rightarrow R = P \times E \times C$$



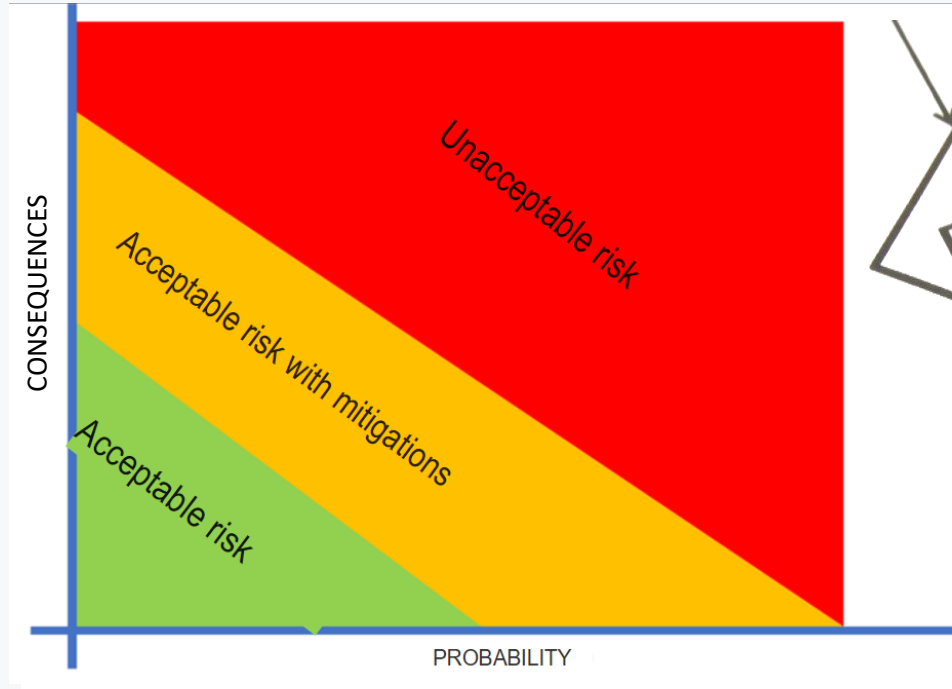
Imagen 1



# RISK LEVELS

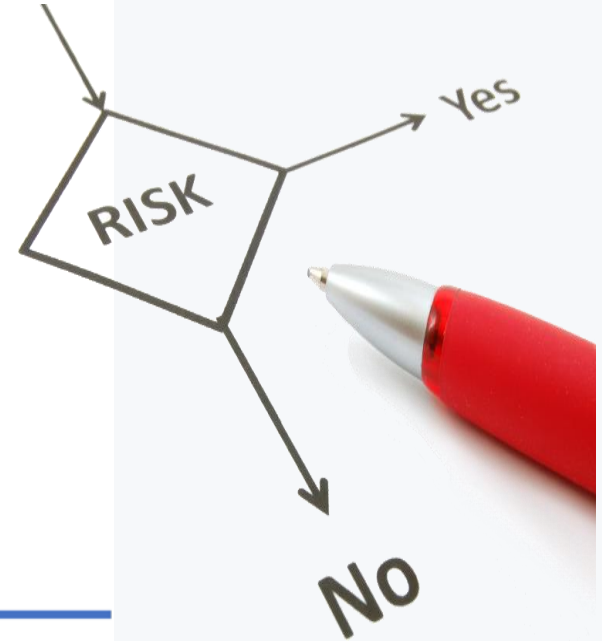


**HIGH**  
**MIDDLE**  
**LOW**



PROBABILITY

Image 2



# RISK TABLES

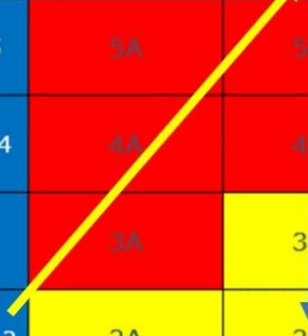


Risk probability	Risk severity				
	Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent 5	5A	5B	5C	5D	5E
Occasional 4	4A	4B	4C	4D	4E
Remote 3	3A	3B	3C	3D	3E
Improbable 2	2A	2B	2C	2D	2E
Extremely improbable 1	1A	1B	1C	1D	1E

1

2

3



# RISK ASSESSMENT **PROCESS**



It is the process by which hazards are identified, risks are analysed and assessed in order to define measures (mitigations) to reduce them to acceptable levels.



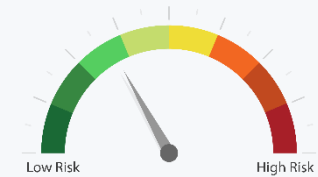
# RISK ANALYSIS



Risk analysis consists of determining the consequences and their likelihood that the consequences may occur.

No.	1	2	3	4	5
Name	Very Low	Low	Medium	High	Very high
Event ( E )	Very unlikely to occur during the next 5000 years	Very unlikely to occur during injection operations	Likely to occur during injection operations	May occur several times during injection operations	Will occur several times during injection operations
Frequency	About 1 per 10000 years or less	About 1 per 1000 years	About 1 per 100 years	About 1 per 10 year	About 1 per year or more.
Feature (F) / Process (P)	Disregarded	Not expected	50/50 chance	Expected	Sure
Probability	Less or equal 1%	Less or equal 10%	Less or equal 50%	Less or equal 90%	Less or equal 99%

# RISK ASSESSMENT



Risk assessment involves the comparison of estimated levels of risks with the risk criteria defined when the context was established, in order to determine the significance of the level and type of risk.



Risk probability	Risk severity				
	Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent 5	5A	5B	5C	5D	5E
Occasional 4	4A	4B	4C	4D	4E
Remote 3	3A	3B	3C	3D	3E
Improbable 2	2A	2B	2C	2D	2E
Extremely improbable 1	1A	1B	1C	1D	1E

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**QUESTION TIME!**