

# Risk Assessment Management



**RAM SOFTWARE**

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*Further than just a legislative obligation for all Employers,  
the Occupational Risk Assessment is the most critical process for a Company  
to organize its H&S management system in an effective way*

### **MANAGEMENT FORCE**

- is engaged in risk assessment projects systematically from its foundation until now
- has designed and applied the software "Risk Assessment Management" from the very beginning of its operation, aiming to optimize the quality of a risk study by providing:
  - ❖ Adequacy and completeness of data
  - ❖ Objective Assessment of risks
  - ❖ Ease of management (reading, printing, reviewing) of the risk assessment records



RISK ASSESSMENT MANAGEMENT is now on its 3rd edition and has incorporated the experience of **MANAGEMENT FORCE** risk assessment projects.

- Great solution for an adequate and appropriate workplace risk assessment
- Workplace and activities data recording
- Risk assessment worksheet (hazard, hazardous factor, control measure, people exposed, risk evaluation)
- Risk evaluation of each job position or any other exposed to risk
- Pending actions monitoring
- Revisions back up



# RAM software

## Key Features

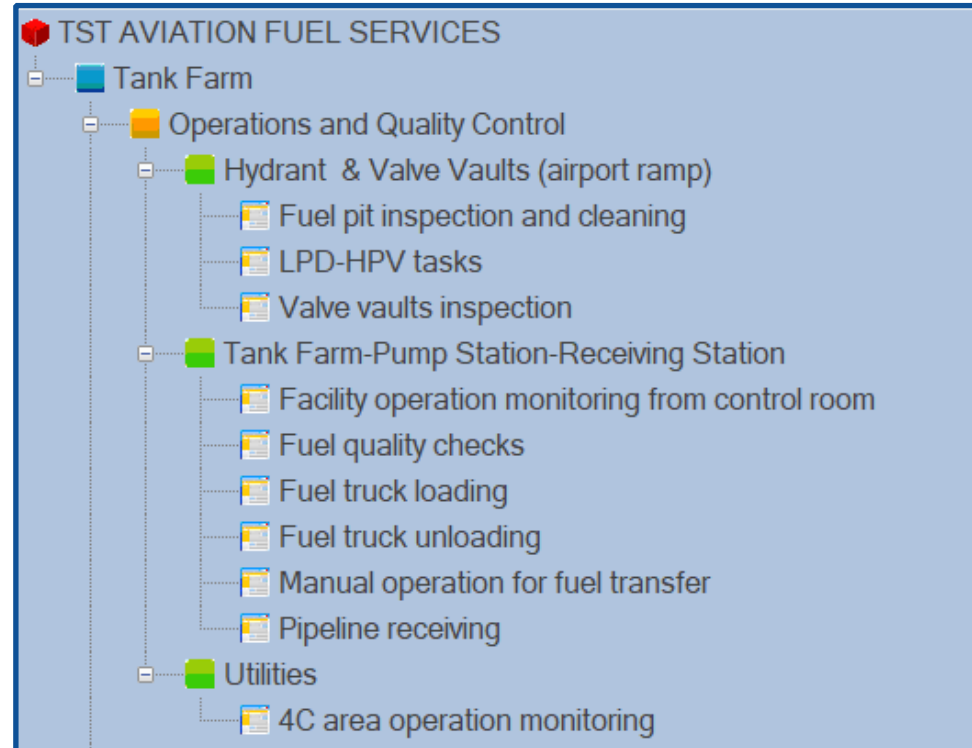
- Multilanguage
- Network access
- Built in hazards and controls database
- Easy data monitoring, grouping, sorting and exporting
- Selection of methodology (2 or 3 parameters)
- Interface customized by the user
- Reports customized by the user
- Multi user access
- User action log



# RAM software

## Organization Structure

- Three-level structure:
  - ▣ *System*
  - ▣ *Subsystem*
  - ▣ *Section*
- Risk Assessment per Task



# RAM software

## Pre-configured Hazards, Factors and Measures database

Hazards							
	English	Greek	Albanian				
▶	Fall from height	Εργασία σε ύψη και σημεία αναρρίχησης					
	Uneven or slippery flat surfaces	Ανώμαλη ή ολισθηρή επιφάνεια					
	Loads/materials fall from height	Αιωρούμενα φορτία/υλικά					
	Moving vehicles and powered industrial trucks	Κινούμενα οχήματα και μηχανές					
	High pressure	Υψηλές πιέσεις					
	Manual handling	Ανύψωση ή μεταφορά φορτίου χειρωνακτικά					
	Hot or cold surfaces - materials	Ζεστές ή κρύες επιφάνειες, υλικά, κτλ.					
	Dangerous objects and surfaces (sharp, rough, etc.)	Αιχμηρές/επικίνδυνες επιφάνειες και αντικείμενα					
Hazardous Factors							
	English	Greek	Albanian				
▶	Working with ladders	Εργασία με φορητή σκάλα					
	Working at ceilings	Εργασία σε οροφή					
	Working near well/excavation	Εργασία κοντά σε εκσκαφή/φρεάτιο					
	Working at platforms	Εργασία σε αποβάθρα					
	Working at scaffolds	Εργασία σε σκαλωσιά					
	Working with lifting platforms	Εργασία με μηχανικές ανυψωτικές διατάξεις/εξέδρες					
Risk Control Measures							
	English	Legislation	Greek	Legislation	Albanian	Legislation	Category
	Employee health monitoring		Ιατρική παρακολούθηση εργαζομένων				Administrative
	Safety instructions for working with scaffolding		Οδηγίες Ασφαλούς Εργασίας για εργασίες ...				
	Safety instructions for working with mobile ladders		Οδηγίες Ασφαλούς Εργασίας για εργασίες ...				
	Employee training		Εκπαίδευση εργαζομένων				Administrative
▶	Mobile ladder according to safety standards		Φορητή σκάλα σύμφωνα με προδιαγραφές				Technical
	Scaffolding according to safety standards		Σκαλωσιά σύμφωνα με προδιαγραφές				
	Certification of scaffolding		Πιστοποίηση σκαλωσιών				



# RAM software

## Selection of Assessment Methodology: 2 or 3 parameters

- Two parameters:
  - Severity (S)
  - Likelihood (L)
- Risk Level combination of S and L

Severity			Likelihood		
Severity	Assessment	Description	Likelihood	Assessment	Description
1	Minor	Insignificant outcome, may be required first aid to	1	Very Unlikely	The likelihood
2	Small	Injuries that may require medical treatment. Absen	2	Unlikely	The likelihood
3	Critical	Injuries that require medical treatment and/or ho	3	Likely	The likelihood
4	Severe	Serious injuries that require medical treatment and	4	Very Likely	The likelihood
5	Catastrophic	Death or 1st degree incapability.	5	Certain	The likelihood

		Severity				
		1	2	3	4	5
Likelihood	1	1 - Minimal	1 - Minimal	2 - Low	2 - Low	2 - Low
	2	1 - Minimal	2 - Low	3 - Medium	3 - Medium	4 - High
	3	2 - Low	3 - Medium	3 - Medium	4 - High	5 - Very High
	4	2 - Low	3 - Medium	4 - High	5 - Very High	5 - Very High
	5	2 - Low	4 - High	5 - Very High	5 - Very High	5 - Very High

Risk Rating			
Risk Level	Color	Description	
1 - Minimal	00FF00	Acceptable risk, no additional measures are required.	
2 - Low	FF6633	Acceptable risk with control measures in place.	
3 - Medium	00FFFF	Acceptable risk, with the provision that control measures will be implemented in lon...	
4 - High	0099FF	Unacceptable risk, control measures to be implemented in short term (no more tha...	
5 - Very Hi...	0000FF	Unacceptable risk, stop working until control measures to be implemented.	

Calculated R		
S	L	Risk Level
1	1	1 - Minimal
1	2	1 - Minimal
2	1	1 - Minimal
1	3	2 - Low
3	1	2 - Low
1	4	2 - Low
2	2	2 - Low
4	1	2 - Low
1	5	2 - Low



# RAM software

## Selection of Assessment Methodology: 2 or 3 parameters

- Three parameters:
  - Severity (S)
  - Likelihood (L)
  - Frequency of Exposure (E)
- Risk Level calculated by product:  $S \times L \times E$

Severity		
Severity	Assessment	Description
1		No impact in health
2		First Aid Injury, Medical Treat
3		LTI, with absence ≤3 working
4		LTI, with absence between 3
5		LTI, with absence ≥3 working
6		LTI, with absence ≥3 working
7		LTI, resulted to light disability
8		LTI, resulted to permanent d
9		LTI resulted to permanent h

Likelihood		
Likelihood	Assessment	Description
1		Almost impossible
2	(~1%-10%)	High Unlikely
3	(~10%-25%)	Almost Unlikely
4	(~24%-40%)	Lowly Possible
5	(~40%-50%)	Possible < 50%
6	(~50%-60%)	Very Possible = 50%
7	(~60%-70%)	Highly Possible > 60%
8	(~70%-80%)	Likely
9	(~80%-90%)	Highly Likely

Exposure		
Exposure	Assessment	Description
1		The employee is exposed c
2		The employee is exposed c
3		The employee is exposed c
4		The employee is exposed c
5		The employee is exposed c
6		The employee is exposed c
7		The employee is exposed c
8		The employee is exposed c
9		The employee is exposed c

Risk Rating				
From	To	Risk Level	Color	Description
0	199	Acceptable	00FF00	Maintain necessary controls to ensure acceptable risk level
200	399	Low	FF6633	Implementation of controls to reduce the risk in a timeframe of two (2) years
400	599	Medium	00FFFF	Implementation of controls to reduce the risk in a timeframe of one (1) year
600	799	High	0099FF	Implementation of controls to reduce the risk in a timeframe of six (6) months
800	1000	Critical	0000FF	Immediate stop of the activity & implementation immediately of the necessary controls to prevent incidents and minimize the risk





# RAM software

## Hazard Measures and related information

- User selection of visible columns
- Measures Related Information:
  - Implemented
  - Due Date
  - Measure Category
  - Responsible person

Hazard	Hazardous Factors	Risk Control Measures							
		Measure	Implemented	Due Date	Category	Responsible	Legislation	Linked File	Comments
Airborne chemical substances	▶ Fuel vapors *	Employee training	<input type="checkbox"/>		Administrative	Resp. Perso...	Leg. 156/17		Comment 1
		Employee health monitoring	<input type="checkbox"/>	13/8/2020	Administrative				Comment 2
		Closed system well maintained	<input checked="" type="checkbox"/>		Technical	Resp. Perso...	Leg. 555/18		
		Equipment checking progra...	<input checked="" type="checkbox"/>					Equip-Check.xls	
			<input type="checkbox"/>						
Dangerous objects and surfaces (sharp, rough, etc.)	▶ Outstanding parts of structures/... Sharp equipment Uncovered corners *	Marking of hazardous parts ...	<input checked="" type="checkbox"/>						
		Safeguards	<input type="checkbox"/>						Comment 4
		Use of appropriate safety gl...	<input checked="" type="checkbox"/>						Comment 5
			<input type="checkbox"/>						
Extreme weather conditions	▶ Extreme cold Strong winds Working at height *	Employee training	<input checked="" type="checkbox"/>			Resp. Perso...			
		Use of appropriate water pr...	<input checked="" type="checkbox"/>			Resp. Perso...			
		Use of water proof safety bo...	<input type="checkbox"/>						
		Stop working policy	<input checked="" type="checkbox"/>						
		Use of appropriate jacket	<input checked="" type="checkbox"/>						
			<input type="checkbox"/>						



# RAM software

## Risk Assessment per position

For each position, specification of of:

- Initial risk level
- Final (objective) risk level

based on the selected methodology (2 or 3 parameters)

Position	Initial		Final	
	S	L	S	L
Quality and Safety Inspectors	2	1	2	1
Control Room Operators	3	1	2	1
▶ Electricians	4	3	2	2
*				



# RAM software

## Reporting

- Selection of Full report or RA table only
- Reports include hazards, hazard measures, proposed measures and assessments
- User selection of visible information

TST AVIATION FUEL SERVICES OCCUPATIONAL RISK ASSESSMENT												
<b>Rev. No.</b>	: 0	<b>Rev. Date</b>	: 1/3/2019 12:00:00 πμ	<b>Next Rev. Date</b>	:							
<b>System</b>	: Tank Farm	<b>SubSystem</b>	: Operations and Quality Control	<b>Section</b>	:	Hydrant & Valve Vaults (airport ramp)						
<b>Prepared By</b>	: Safety Practitioner	<b>Approved By</b>	: H&S Manager	<b>Section Responsibility</b>	:	Operations & Quality Control Supervisor						
<b>Task</b>	: Fuel pit inspection and cleaning											
<b>No of Employees</b>	: 7	<b>Shift</b>	: Morning and evening			<b>Task General Risk</b>	: 4 - High					
Hazard	Implemented Measures	Position	Sev.	Lik.	Risk	Proposed Measures	Resp.	Due Date	Sev.	Lik.	Res. Risk	
Airborne chemical substances <u>Hazardous Factor</u>	Equipment checking program in place <u>Technical</u>	Control Room Operators	3	1	3	<u>Administrative</u>	Resp. Person 1	13/08/2020	2	1	2	
		Electricians	4	3	12	Employee health monitoring (Comment 2)			2	2	4	
		Quality and Safety Inspectors	2	1	2	Employee training (Comment 1 / Leg. Leg. 156/17)			2	1	2	
Fuel vapors	Closed system well maintained (Leg: Leg. 555/18)											
Dangerous objects and surfaces (sharp, rough, etc.) <u>Hazardous Factor</u>	Marking of hazardous parts of equipment Use of appropriate safety gloves (Comment 5)	Quality and Safety Inspectors	2	2	4	Safeguards (Comment 4)			2	2	4	
		Outstanding parts of structures/equipment										



# RAM software

## RA Monitoring

- Monitor all aspects of Risk Assessment information
- User selected criteria, grouping and visible columns
- Reports export in Word, Excel or PDF format

The screenshot displays the RAM software interface. At the top, there are three dropdown menus for 'System', 'SubSystem', and 'Section', all set to 'All'. Below these are four tabs: 'RA Revision', 'Hazardous Factors', 'Pending Measures', and 'Assessment'. The main area shows a hierarchical tree view on the left with 'System' expanded to 'SubSystem' and 'Section'. The main table has columns: Task, Revision No., Revision Date, Next Revision ..., Shift, Employees ..., Prepared By, and Approved by. The table is filtered to show 'Tank Farm (23 Items)'. The expanded view shows 'Operations and Quality Control (10 Items)', which includes 'Hydrant & Valve Vaults (airport ramp) (3 Items)' and 'Tank Farm-Pump Station-Receiving Station (6 Items)'. The data rows are as follows:

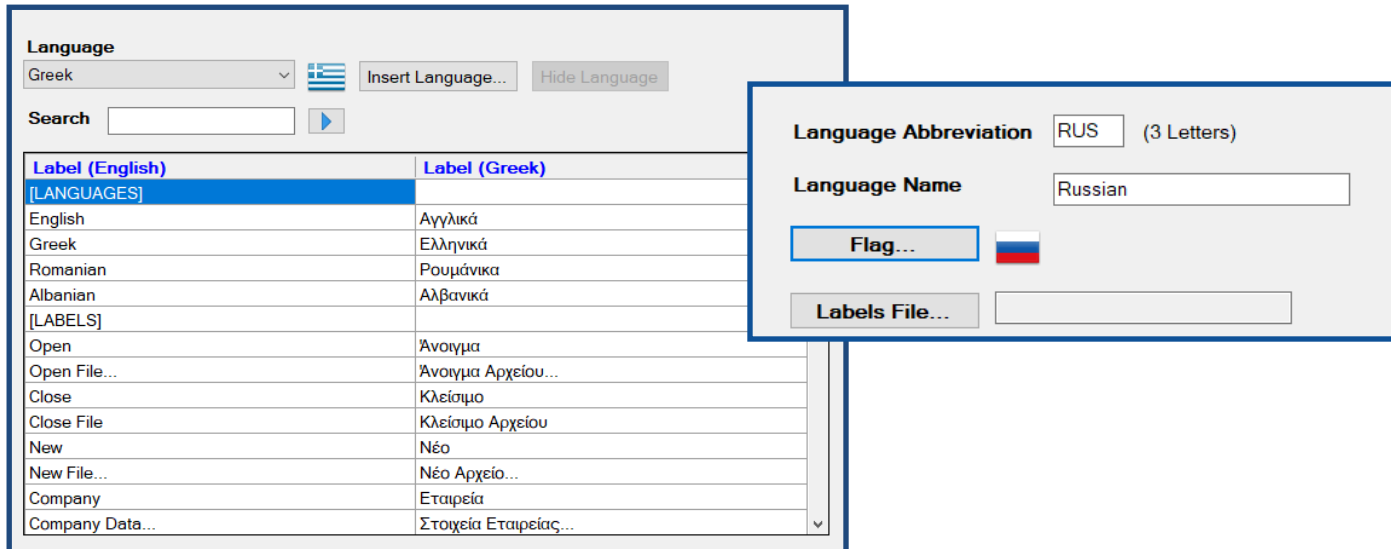
Task	Revision No.	Revision Date	Next Revision ...	Shift	Employees ...	Prepared By	Approved by
Tank Farm (23 Items)							
Operations and Quality Control (10 Items)							
Hydrant & Valve Vaults (airport ramp) (3 Items)							
Fuel pit inspectio...	0	1/3/2019		Morning and eve...	7	Safety Practitioner	H&S Mana
LPD-HPV tasks	0	1/3/2019		Morning and eve...	7	Safety Practitioner	H&S Mana
Valve vaults insp...	0	1/3/2019		Morning and eve...	7	Safety Practitioner	H&S Mana
Tank Farm-Pump Station-Receiving Station (6 Items)							
Facility operation ...	0	1/3/2019		Shift	12	Safety Practitioner	H&S Mana
Fuel quality checks	0	1/3/2019		Shift	7	Safety Practitioner	H&S Mana
Fuel truck loading	0	1/3/2019		Morning and eve...	7	Safety Practitioner	H&S Mana
Fuel truck unloadi	0	1/3/2019		Morning and eve	7	Safetv Practitioner	H&S Mana



# RAM software

## Full multiple language support

- RAM is preconfigured for use in four languages: English, Greek, Albanian and Romanian
- Users are free to configure any number of languages in the application and translate all labels and messages to the new languages
- All risk assessment information entered in one language can be easily translated by the user to any other language and produce the same reports in different languages



# RAM software

## Additional capabilities

- **Revisions backup**

Every revision of a Risk Assessment is retained in the database and can be accessed through the RA history
- **Overdue actions notification**

Users are notified for revisions and measures that should have been processed
- **Risk Assessment duplication**

RAs can be copied from one section to another
- **Organization structure duplication**

Any branch of the hierarchical structure can be copied to another branch in the same file
- **Customization of application labels and messages**

All labels and messages in any language can be easily modified by the user



Thank you for your interest!