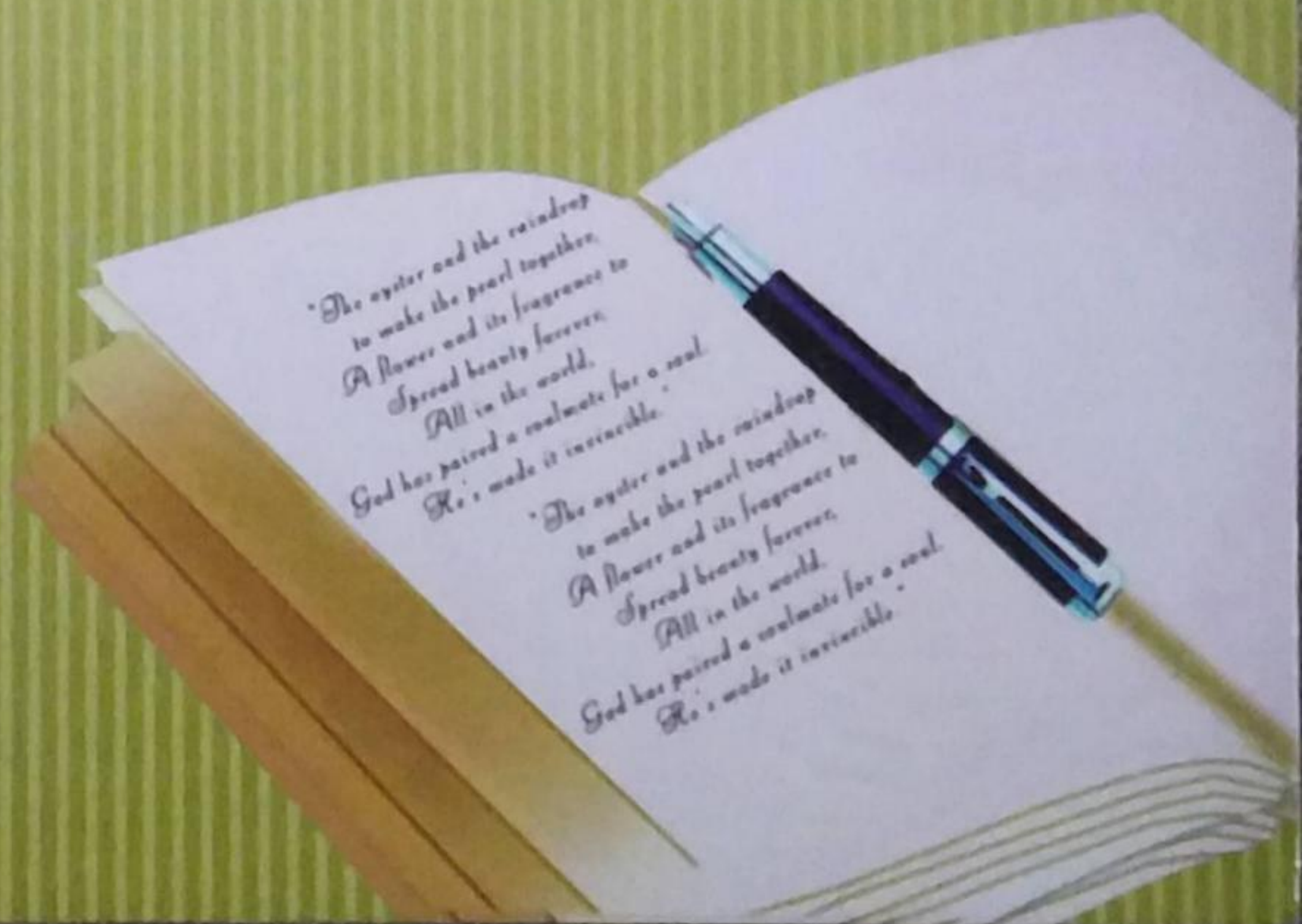




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An Investigation into the Effect of Risk Productivity in Selected Industrial Units in Chandrapur District—A Strategic Management Centered Approach

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Abstract : The present study was made an attempt to identify the various industrial unit in Chandrapur district includes towns Like; Ghugus, Korpana, Rajura, Ballarpur, Bramhapuri, Chimur, Warora etc. The study also identifies the strategic risk management in industrial units due to assistance of local bodies in Chandrapur district.

This Paper present result of data collected from industrial management authorities, insurance agents as well as local bodies in Chandrapur District and interpretation of results obtained after analysis of data. For the study purpose, 200 industrial units were selected from Chandrapur District. In addition to this, 100 insurance agents associated with different insurance companies as well as 15 local bodies representative 1 from each tehsil. Hence, data from total 315 (200+100+15) respondents was collected in the study. The collected data was analysed by using appropriate statistical tools. Descriptive statistics such as frequency and percentage, mean etc.

Introduction : Risk management is an activity which integrates recognition of risk, risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. Some traditional risk managements are focused on risks stemming from physical or legal causes (e.g. natural disasters or fires, accidents, death). Financial risk management, on the other hand, focuses on risks that can be managed using traded financial instruments. Objective of risk management is to reduce different risks related to a pre-selected domain to an acceptable. It may refer to numerous types of threats caused by environment, technology, humans, organizations and politics. Present research is to make an attempt to identify the risks faced by the various Industrial units in Chandrapur district and examined the different Strategies adopted by industry for risk management.

Risk : Risk is unavoidable and present in every human situation. It is present in daily lives, public and private sector organizations. Depending on the context (insurance, stakeholder, technical causes), there are many accepted definitions of risk in use.

The common concept in all definitions is uncertainty of outcomes. Where they differ is in how they characterize outcomes. Some describe risk as having only adverse consequences, while others are neutral.

One description of risk is the following: risk refers to the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of an organization's objectives.

The phrase "the expression of the likelihood and impact of an event" implies that, as a minimum, some form of quantitative or qualitative analysis is required for making decisions concerning major risks or threats to the achievement of an organization's objectives. For each risk, two calculations are required: its likelihood or probability; and the extent of the impact of consequences.

Finally, it is recognized that for some organizations, risk management is applied to issues predetermined to result in adverse or unwanted consequences. For these organizations, the definition of risk which refers to risk as "a function of the probability (chance likelihood) of an adverse or unwanted event, and the severity or magnitude of the consequences of that event" will be more relevant to their particular public decision-making contexts.

Williams and Schroder (1999) claimed that risk is a very broad subject because everything we do has an element of risk. It is a complex concept, which does not easily lend itself to a neat, one line definition (Cross, 2000). Understandably, there are many different definitions of risk.

Fleisher (1990) suggested that although there is no universally accepted definition of risk, several working definitions are commonly used. He went further to indicate risk as a situation in which the resolution of uncertainty will affect the well-being of a firm or decision maker and which involves the chance of gain or loss. Krause (1995) defined risk as the estimated measure, or probability, of something happening. According to Cooper et al. (1993) and Williams and Schroder (1999), a state of risk is con-

sidered to exist whenever knowledge of the situation enables the likelihood of the various possible events to be assessed in advance.

Risk is used by some authors to describe situations where one can attach probabilities to the occurrence of events influencing the outcome of a decision (Mishra, 1996). Likewise, Just et al. (2003) referred to risk as situations in which the objective probability distribution of outcomes is known by the decision-maker. In other words, risk is considered as uncertainty with consequences (Blackburn et al., 1994; Hardaker et al., 1997; Cross, 2000). Risk occurs when there is a chance of something happening that will have an impact upon objectives.

Research Objectives

1. To study the risk management tasks and roles in industrial units.
2. To study the insurance covered by the industries for all operations.
3. To evaluate role of employees in industrial unit regarding risk management activity.

Research Hypothesis

1. Risk management tasks and roles are clearly defined in industrial units.
2. Industrial units in Chandrapur District have right insurance cover for all operations.
3. Employees in industrial unit participate in risk management activity.

Awareness of risk management members for consulting specialist for getting information about risk management in the unit

Table 1: Information regarding awareness of risk management members for consulting specialist for getting information about risk management in the unit

Awareness of risk management members about getting information regarding risk management and which specialist to contact	Frequency	Percentage
Yes	162	81.0
No	10	5.0
Can't Say	28	14.0
Total	200	100
Chi Square	df	Sig.
48.13	2	0.000

Above Table No. 1 illustrates responses of authorities of industrial units in Chandrapur District regarding awareness of risk management members for consulting specialist and for getting information about risk management in the unit. It is evident from the information that according to 81% authority risk

management members are aware about contacting concerned person from which they can get information of risk management whereas 14% authorities are uncertain regarding awareness of risk management members in the unit about contacting concerned person for getting information about risk management. In addition to this, 5% authorities reported that employees working in the unit are not aware of contacting concerned person for getting information about risk management. The non-parametric chi square statistics demonstrate that there is significant (Chi Sq. – 48.13; df- 2; P<0.05) difference among opinion of industry representatives about awareness of risk management members for consulting specialist and for getting information about risk management. Thus, it is evident from the above information that risk management members working in significantly (P<0.05) high percentage of industrial units in Chandrapur District are aware of contacting concerned person for getting information about risk management.

Risk management tasks and roles clearly defined in the unit

Table no 2: Information about defining risk management tasks and roles clearly in the unit

Defining risk management tasks and roles clearly in the unit	Frequency	Percentage
Yes	179	89.5
No	4	2.0
Can't Say	17	8.5
Total	200	100
Chi Square	df	Sig.
60.81	2	0.000

Above Table No. 2 illustrates responses of authorities of industrial units in Chandrapur District about defining risk management tasks and roles clearly in the unit. It is evident from the information that according to 89.5% authority, risk management tasks and roles are clearly defined in the unit whereas 8.5% authorities are uncertain regarding risk management tasks and roles clearly defined in the unit. In addition to this, 2% authorities reported that risk management tasks and roles are not clearly defined in the unit. The non-parametric chi square statistics demonstrate that there is significant (Chi Sq. – 60.81; df- 2;

P<0.05) difference among opinion of industry representatives about defining risk management tasks and roles clearly in the unit. Thus, it is evident from the above information that risk management tasks and roles clearly defined to the employees working in substantially (P<0.05) high percentage of industrial units in Chandrapur District.

Table No. 3: Information regarding participation of employees in the risk management activities in the unit

Participation of employees in the risk management activities	Frequency	Percentage
Yes	132	66.0
No	22	11.0
Can't Say	46	23.0
Total	200	100
Chi Square	df	Sig.
12.19	2	0.000

Above Table No. 3 illustrates responses of authorities of industrial units in Chandrapur District regarding participation of employees in the risk management activities in the unit. It is evident from the information that according to 66.0% authority employees participate in risk management activities whereas 23.0% authorities are uncertain about participation of employees in risk management activities. In addition to it according to 11.0% authorities employees do not participate in risk management activities. The non-parametric chi square statistics demonstrate that there is significant (Chi Sq. - 12.19; df- 2; P<0.05) difference among opinion of industry representatives about participation of employees in the risk management activity. Thus, it is evident from the above information that considerably (P<0.05) high percentage of employees of the industrial units in Chandrapur District participate in risk management activities.

Conclusion

Employees working in most of the industrial units in Chandrapur District are aware regarding risk management. Risk management is followed in industrial units. Risk management is very important for industries. Industrial units in Chandrapur District get support from management about risk management. General policies of risk management is included in the

operational policy of industrial units in Chandrapur District. Individual risk management control measures are carried in industrial units. Improvement in process is done before problems arise in industrial units. Risk management training is provided by in industrial units to the employees. Risk management members working in industrial units are aware of contacting concerned person for getting information about risk management. Risk management tasks and roles clearly defined to the employees working in industrial units.

Bibliography

1. A Process Driven Approach to Integrated Environments, Malcolm, N.E. and McKennon, J., Proceedings INCOSE International Symposium 1997,1997
2. A Sixth Discipline for Future Awareness, Hall, E and Gorsuch, T., Proceedings INCOSE International Symposium 1997,1997
3. Application of ANSI Standard to Space Station Resources, Taylor, I and Bassler, J., Proceedings INCOSE International Symposium 1995,1995
4. Application of some Risk Assessment Techniques: Formal Expert judgement and accident sequence precursors, Goossens, L.H.J. and Cooke, R.M., Safety Science vol 26 No 1/2 1997,1997
5. Applying Programmatic Risk Assessment to Nuclear Materials Stabilisation R&D Planning, Kenley, C.R. and Brown-Van Hoozer, S.A., Proceedings INCOSE International Symposium 1997, 1997
6. Comparing safety analysis techniques, Rouvroye, J.L. and Bliiek, E.J. van den, Reliability Engineering And System Safety #75 2002, 2002
7. Complex System Product Development: Adding Value by Creating Information and Reducing Risk, Browning, T.R., Deyst, J.J., Eppinger, S.D. and Whitney, D.E., Proceedings INCOSE International Symposium 2000, 2000
8. Denver International Airport: How could System Engineering Principles Have Prevented Disaster?, Cook, R.H., Proceedings INCOSE International Symposium 2000,2000
9. Establish a Baseline Assessment to Manage Risks Using Risk Matrix, Willhite, A.M. and Norton D.R., Proceedings INCOSE International Symposium 2000, 2000
10. Evaluation of Risk Management Strategies for a

- low-cost, High-Risk Project, Shishko, R. and Jorgensen, E.J., Proceedings INCOSE International Symposium 1996,1996
11. Experiences in using PRA as an operational tool, Perryman, L.J.; Foster, A.S. and Nicholls, D.R., Int. Journal Pressure Vessels and Piping #61 1995,1995
 12. Expert Decision Making, Hutton, RJ and Klein, G, Systems Engineering # 2 1999,1999
 13. Expressing and interpreting the results of quantitative risk analysis. Review and discussion, Aven, T and Porn, K, Reliability Engineering and System Safety # 61 1998, 1998
 14. Factors in Technical Risk Assessment, Hamann, R.J. and Zandbergen, B.T.C., Proceedings 3rd European Systems Engineering Conference, 2002
 15. Factors in the selection of a risk assessment method, Lichtenstein, S, Information management and Computer Security 4/4 1996, 1996
 16. Facts and Values in risk assessment, F.B.Cross, Reliability Engineering and System Safety #59 1998, 1998
 17. Human error Identification for risk assessment of high risk systems Part 1: review and evaluation of techniques, Kirwan, B, Applied Ergonomics Vol 29 No 3 1998, 1998
 18. Integrated Risk Management: A Case Study, Roberts, B.B. and Winterlin, R.C., Proceedings INCOSE International Symposium 1996, 1996
 19. Life Cycle Risk Management, Brekka, L.T. and Vlay, G.J., Proceedings INCOSE International Symposium 1995, 1995
 20. Managing Research and development Projects: A Systems engineering Approach in the early stages of design, Brink, JR and Peisert, GD, Proceedings INCOSE International Symposium 1999, 1999
 21. Mathematical tools for probabilistic risk assessment, Bedford, T and Cooke, R., Delft University of Technology, 2001
 22. Meaning and contextualisation in risk assessment, Jones, T.H., Reliability Engineering and System Safety #59 1998, 1998
 23. Methods and techniques for risk prediction of space shuttle upgrades, Hoffmann, C.R. ; Pugh, R. and Faysall, S.,AIAA Paper 98-25195, 1998
 24. msmedinagpur.gov.in
 25. Nam Cao Nguyen, BAgrEcon, National economics university, vietnam MAgrbus: the university of Adelaide, Australia
 26. On Comparing PRA results with operating experience, Martz, HF and Picard, R.R., Reliability Engineering and System Safety #59 1998, 1998
 27. Onderzoek naar een Mogelijke Risk Management Methode, Baan, J.,Stork, Fokker Aerostructures report FAE/EMP/99-10- 005, 1999
 28. Principles and guidelines for project risk management, Pennock, MJ and Haimes, Y.Y., Systems Engineering Vol 5 2002, 2002
 29. Program Risk: the Balancing of Performance, Schedule and Cost Risks, May, C. and Olson, R., Proceedings INCOSE International Symposium 1995,1995
 30. Prophet- The engine for integrated risk management ,Huff, D.S., Proceedings INCOSE International Symposium 1997, 1997
 31. Providing a Framework for Effective Software Quality Measurement: Making a Science of Risk Assessment, Martin, R.A. and Shafer, L.H., Proceedings INCOSE International Symposium 1996, 1996
 32. Risk and Opportunity Management and the Project Life cycle, Forsberg, K. and Mooz, H., Proceedings INCOSE International Symposium 1995, 1995
 33. Risk Assessment and Risk Management, Heste, R.E. and Harrison, R.M,ISBN 0-85404-240-7, 1998
 34. Risk Indicators as A tool for Risk control, Oien, K, Reliability Engineering and System Safety #74 2001, 2001
 35. Risk Influence Analysis A method for identification and assessment of risk reduction strategies, Rosness, R, Reliability Engineering And System Safety #60 1998, 1998
 36. Risk Management for the NASA/JPL Genesis Mission: A Case Study, Roberts, B.B. and Bennett, R.B., Proceedings INCOSE International Symposium 2000, 2000
 37. Risk Management for the new millennium, Dr D Hillson, Proceedings INCOSE International Symposium 1999, 1999
 38. Risk Management Guide for DoD Acquisition, Anon., Defense Systems Management College Press, Virginia, USA, 2000
 39. Risk Management in ESA's Scientific Directorate: A Case study, Schroeter, J.,ESA Bulletin 107, pp. 64-71, 2001

40. Risk management literature survey, Maarteen G.H. Bijil & Robbert J. Hamann, Delft university of technology Aerospace engineering, August 2002
41. Risk Management on the Advanced Tomahawk Weapon Control System: a Practical Application of Risk Management in Today's Defense Environment, Ford, W.C., Proceedings INCOSE International Symposium 1995, 1995
42. Risk Management, Anon., KLM Manual, 1999
43. Risk Management: A Systems Paradigm, Hessami, A.G., Systems Engineering # 3 1999, 1999
44. Risk Reduction Through Changing Success Criteria, McKinney, D., Proceedings INCOSE International Symposium 2000, 2000
45. Risk, Fokker Space corp., User's Manual Risk\$, 1999
46. Safety risk assessment and management - The ESA approach, Preyssl, C, Reliability Engineering and System Safety # 49 1995, 1995
47. Sources of Schedule Risk in Complex System development, Browning, T.R., Systems Engineering #3 1999, 1999
48. Space Project Management; Risk Assessment, ESA/ESTEC, ECSS standard ECSS-M-00-03A, 2000
49. Space Systems Engineering (Issue 2), Hamann, R.J., Delft University of Technology, 2001
50. Summary of the Results from the Risk Management Program for the Mars Microrover Flight Experiment, Shishko, R. and Matjevic, J.R., Proceedings INCOSE International Symposium 2000, 2000
51. Systems engineering and Cost as an independent variable, Brady, J, Systems Engineering Vol 4 No 4 2001, 2001
52. Tailored Risk Management; a Successful Application to a Major Program, Palmer, J.A. and Dechoretz, J. A., Proceedings INCOSE International Symposium 2000, 2000
53. The evaluation Of Risk Management Tools, Elseth, B.O. and Hamann, R.J., Proceedings 15th Int. Cost Engineering Congress, 1998
54. The Relationship of Technology Change Management to Risk Management, Mosier, S.P., Guenterberg, S.A. and Rphael, R.R., Proceedings INCOSE International Symposium 2000, 2000
55. The Use of an Automated System Engineering Tool to support the Risk Management Process, Sadler, G.G. and Baker, L., Proceedings INCOSE International Symposium 1995, 1995
56. Three Facets of Risk, Yellman, T.W., Proceedings 2000 World Aviation Conference, 2000
57. Uncertainty in probabilistic risk assessment, Winkler, RJ, Reliability Engineering and System Safety # 54 1996, 1996
58. Using a directed graph methodology for integrated risk assessment on space station freedom program, Gantzer, DJ, AIAA Paper 93-4675-CP, 1993
59. What is " Risk", Hall, D.C., Risk Management Working group INCOSE, 2002
60. What is "Risk"? Results from a survey exploring definitions, Dr D Hillson, Risk Management Working group INCOSE, 200.
61. www.acclimited.com
62. www.biltpaper.com
63. www.mahagenco.in
64. www.videoconindustriesltd.com

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