



# HARTRON

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This letter serves as my recommendation to MBS Ltd. I would like to mention that majority of company specialists are former Hartron employees. Since 1995 MBS has been developing various projects at Hartron request.

The primary area where we find it beneficial to contract MBS is development of the CASE tools for modeling and simulation of software products for spaceship control.

The latest project delivered by MBS in 2000 was 2 year project on implementation of the "CUPOL 2.0" solution for design, engineering and testing of the software and algorithms for composite objects control systems (aircraft and space manufacturing). It was tested in large state-controlled space and atomic companies.

The software provides tools supporting:

- Algorithms of real-time control systems: highest priority is functionally correct management of complex, multifunctional objects
- Algorithms of displaying objects' behavior: highest priority is correct display of objects' behavior.
- Algorithms of displaying the environment: highest priority is correct display of complex' environment.
- Creating a software model of control system and testing it in different modes with stochastic or controlled behavior of the environment.
- Generating the program code in C language for its further compiling into executable program code.
- Generating tests (or sets of test cases) for testing the software of control system at all the stages of design, testing and run-time (alpha tests, complex tests, acceptance tests, analysis of emergencies while operation)
- Generating program documentation.

Cupol 2.0 is developed to run in MS Window operating environment. C++ , Rama dbVista were used for implementation of the single – user mode; DCOM , Visual C++, ORACLE were used for multi-user mode.

Project has been carried strictly according to ESA standards.

I positively evaluate results of our work with MBS including both quality of the solution delivered and support provided.

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