

**JOINT ARCHITECTURE FOR
UNMANNED GROUND SYSTEMS
(JAUGS)
WORKING GROUP**

March 16-17, 1998
Denver, CO

Minutes of Meeting

1. The meeting agenda is provided at TAB A and the list of attendees at TAB B.
2. The JAUGS Working Group (WG) conducted its third meeting on March 16-17, 1998 at the facility of the Defense Contract Management Command in Denver, CO. The stated objectives of the meeting were to discuss members' comments on the Reference Architecture (RA) and to present information about other architectural efforts. Legal considerations prevented the previously scheduled inclusion of industry at this meeting.
3. Mr. Robert Wade welcomed the members to Denver, provided administrative information, and presented the agenda for the meeting.
4. The WG discussed the considerations regarding industry participation in JAUGS development. Not all members had been apprised that for legal reasons, industry could not be included in the Denver meeting. Consensus was that industry is still a critical part of this process, and it's very important for them to be brought on board at the next meeting. It was decided to schedule the meeting 28-30 April in Huntsville, AL. The WG then discussed the following aspects of the next meeting: industry members must pre-register; it should be at little or no cost; limit attendance to 2 or 3 people per company or major division; first day (28th) would be WG only; second day (29th) would be presentation of JAUGS; third day (30th) would be for questions from industry. Additional ideas were the possibility of handing out questionnaires at the end of the second day, and having the WG meet by itself at the end of the third day to share impressions.
5. Mr. David McConnell presented a briefing on the Generic Open Architecture (GOA). This architecture is an emerging standard from the Society of Automotive Engineers (SAE). His briefing covered the GOA stack (hierarchy), messages, establishing service connections, and a description of service providers. Mr. Susanta Sarkar also presented information regarding GOA.
6. Ms. Evelyn Labbate presented an overview of the Multiple Robot Host Architecture (MRHA). It is being developed by SPAWAR in San Diego for the MDARS programs. The purpose of MRHA is to enable one operator to control and receive assessment reports from several robotic vehicles, be they interior or exterior.
7. The WG commenced discussion of comments sent in by the members. This generated an informative question and answer session on the design approach of JAUGS. Most of the discussion and questions centered on service providers, service connections and to

just what level will JAUGS specify requirements. This discussion was very beneficial in bringing members to a baseline understanding of JAUGS.

8. The following action items were accepted by the members as indicated:
 - a. Submit copies of ORD's applicable to JRP programs and message sets from same. **(Action: All)**
 - b. ARL and the UGV/S JPO to agree on a standard connection port for the purpose of evaluating transferred technology. **(Action: Mr. Wade and Mr. Haas)**
 - c. Propose wording on how to support asynchronous event driven queues. **(Action: Mr. Brown)**
 - d. Propose a format for the JAUGS RA. **(Action: All)**
 - e. Publish reminders about details of future meetings. **(Action: Mr. Kitora)**
 - f. Investigate Embedded Battle Command (EBC) system on the Bradley IFV. **(Action: Mr. Wade, Mr. McConnell)**
8. The meeting concluded with a tour of Omnitech Robotics, Inc. The next meeting of the JAUGS Working Group will be 28-30 April 1998 in Huntsville, AL.

APPROVED:

/s/ Robert Wade

date

AGENDA
JAUGS WORKING GROUP MEETING
16-17 MARCH 1998

DEFENSE CONTRACT MANAGEMENT COMMAND, DENVER CO

MONDAY 16 MARCH

1300-1310	WELCOME/ADMIN	MR. KOTORA
1310-1345 ITEMS	REVIEW OF ACTION	MR. WADE
1345-1400	INDUSTRY PARTICIPATION: DISCUSSION	MR. WADE, ALL
1400-1430	MULTIPLE ROBOT HOST ARCHITECTURE (MRHA)	MS. LABBATE
1430-1500	BREAK	
1500-1630	MESSAGE SETS	MR. McCONNELL

TUESDAY 17 MARCH

0800-0930	GENERIC OPEN ARCHITECTURE	MR. VAN KIRK
0930-1130 W/BREAK	V0.2 COMMENTS	ALL
1130-1200	WRAP-UP/ ACTION ITEM REVIEW	MR. WADE
1200-1330	LUNCH/TRAVEL TO OMNITECH ROBOTICS, INC (ORI)	
1330-1430	TOUR ORI	ALL