MILITARY ROBOTICS CONFERENCE

15th-16th MAY 2008

CAFE ROYAL, PICCADILLY, LONDON

DRAFT AGENDA

1. **U.S.ARMY FUTURE COMBAT SYSTEM (FCS) SMALL UNMANNED GROUND VEHICLE (SUGV)**
    - Packbot
    - Accelerated Fielding
    - Road Map

2. **EUROPEAN ROBOTICS DEVELOPMENTS**
   Mr. Frank E. Schneider, NATO Chair of Military Applications for Multi-Robots Systems and Head of European Robotics Group, Research Establishment for Applied Science, Germany (Confirmed)
    - Multi-Robot Systems
    - European Land-Robot Trials
    - Road Map for Short-Term Realizable Robot Systems

3. **U.K. MILITARY ROBOTICS RESEARCH**
    - Systems Approach
    - Research Initiatives

4. **U.K. UNMANNED UNDERWATER VEHICLE PROGRAMMES AND REQUIREMENTS**
   Commander Mark Cooper, DEC (UWB), U.K. MoD (Confirmed)

5. **FRENCH UNMANNED UNDERWATER VEHICLE RESEARCH AND DEVELOPMENT**
    - REDERMOR AUV
    - SPARTAN USV

6. **FUTURE UUV REQUIREMENTS**
   Dr. Norman Friedman, International Naval Consultant and Author (Provisional)
    - UUVs as Force Multipliers
    - Data-Gathering UUVs
    - Roles of Submarine-Borne UUVs

7. **NORWEGIAN HUGIN AUV**
    - HUGIN 1000MR for Royal Norwegian Navy
    - Finnish MCMV2010 Project
    - Synthetic Aperture Sonar
    - Self Handling
    - Acoustic Communication Link

8. **CANADIAN FORCES MINI-ROV PROGRAMME**
   Captain Rob Reynolds, Mini-ROV Programme Manager, Canadian Forces (Confirmed)
    - Vanguard MK.2 System
    - Programme Description
    - System Performance

9. **CURRENT ACTIVITIES IN AUSTRALIAN GROUND-BASED MILITARY ROBOTICS**
   Dr. Brian Jarvis, Senior Research Scientist, Weapon Robotics Group, DSTO Australia (Provisional)
    - Low cost counter IED robots
    - S/A inititiation systems for robots
    - Low cost remote under vehicle inspection
    - Weaponisation of robots
    - Haptic robots
    - Remote CBRN sensing
    - Object recognition image based navigation

10. **UNMANNED GROUND VEHICLES: AUTONOMOUS OR TELE-OPERATED**
    Dr. Johan C. van den Heuvel, TNO Defence, Security and Safety Observation Systems, the Netherlands (Confirmed)
    - How to break away from niche tasks only characterised by: Dangerous, Dull, and Dirty?
    - What are future tasks of UGV's in addition to current tasks?
    - Is autonomy the way forward in UGV's?
    - What role can robotics play in counter insurgence operations?
    - How do we transfer robotics technology and robots from the laboratory to operations in the field?
    - How can robots be used to create enhanced situational awareness?
    - What is to be preferred tele-operated of autonomous robots?
    - How can human operator control of a robot be improved?

11. **REMOTE CONTROLLED WEAPON SYSTEMS**
    - Modular Designs
    - Simplicity of Installation
    - Technical Features

12. **SWARM SYSTEMS**
    - Swarm Intelligence
    - Nanobots
    - Swarm Systems

13. **DARPA PERCEPTOR INTEGRATION PROGRAMME**
    - Spinner Platform
    - Terrain Data for Path Planning
    - Technology Transfer to FCS UGV

14. **MILITARY ROBOTICS RESEARCH AND DEVELOPMENT AT THE U.S. SPACE AND NAVAL WARFARE SYSTEMS CENTRE**
    - Development and Application of Undersea, Sea Surface, Ground and Aerial Vehicles as well as Applied Research Projects
    - Current Projects
    - Future Research Areas

15. **MILITARY ROBOTICS – HUMAN FACTORS**
    - Problems of Full Autonomy
    - Designing Emotive Structures

16. **FUTURE MARKETS FOR MILITARY ROBOTICS**
    - Unmanned Ground Vehicles
    - Autonomous Underwater Vehicles
    - U.S. Market
    - European Market
    - Other Markets including Canada and Australia