Moderator: Newman, Ebel **Panel: RF MEMS Reliability:Overcoming Technological Barriers for Real System Insertion**

Focus:

Speaker	Author	Title	Phone Number	e-mail	Company	Paper Received
1	Dr. Larry Corey	RF MEMS For DARPA SPO Applications	703-248-1513	lcorey@darpa.mil	DARPA SPO	55
2	Dr. Michael T. Dugger	Contact Switch Reliability Issues	505-844-1091	mtdugge@sandia.gov	Sandia	63
3	Dr. J. Robert Reid	Capacitive Switch Reliability Issues	781 377-1077	James.Reid@hanscom.af.mil	AFRL	56
	Panel					
1	Dan Judy	panelist	301-394-3568	djudy@arl.army.mil	ARL	
2	Jeff DeNatale	panelist	805 373-4439	jfdenatale@rsc.rockwell.com	Rockwell	
3	Chuck Goldsmith	panelist	214-552-7055	goldsmith@ieee.org	Cogent Solutions	
4	Chuck Wheeler	panelist	480 633 3785 x 4003	cwheeler@microlab.com	Microlab, Inc	
5	Dan Bechtle	panelist	609 734-3097	dbechtle@sarnoff.com	Sarnoff	
6	Carl B. Freidhoff	panelist	410-993-2911	carl_b_freidhoff@mail.northgrum.com	Northrop Grumman	

Breakout

The RF-MEMS switch holds the promise of wide utility for applications which require low insertion loss, high linearity, moderate switching speeds, and low to moderate power. As a surface-micromachined device, the RF-MEMS switch also holds the promise of low-cost integration on a variety of substrates, including substrates bearing active semiconductor devices. However, the presence of suspended beams and membranes and the actuation of these beams and membranes across a gap adds a different dimension to the reliability of these devices than that present in traditional semiconductor devices. The limitation in lifetime due to these structures currently inhibits the insertion of these devices into systems. This panel session will feature invited speakers and panelists from

insertion of these devices into systems. This panel session will feature invited speakers and panelists from government laboratories and leading RF MEMS manufacturers who will discuss the reliability of RF-MEMS switches in either of its two common forms (contact switch and capacitive switch) and explore the pathways to real system insertion.