**LARA: Biologically inspired Engineering and Exploration Sys -----Original Message-----From: Linda Mennitt [mailtem Mission concept and components for lunar exploration and exploitation tools.** P.E. Clark1 (Contact Author), S..A. Curtis2, C.Y. Cheung2; M.L. Rilee1, G. Marr2; W. Truszkowski2, Contact address: Pamela Clark, Code 695, NASA/GSFC, Greenbelt, MD 20771, 301-286-7457, Pamela.clark@gsfc.nasa.gov; 1Affiliation: L3 Communications, Government Services, Inc., 3750 Centerview Drive, Chantilly, VA 20151, 2Affiliato:felix.com@verizon.net] Sent: Monday, March 14, 20tion: Code 695, NASA/GSFC, Greenbelt, MD 20771.

ANTS (Autonomous Nano Technology Swarm) Architecture is well suited to surface-based forms for use on the Moon or Mars or any relatively low G surface environment, as illustrated by an application called LARA (Lander-Antenna-Rover Arrays). ]. Here, we analyze the nature of components and sequence of behaviors required for spacecraft operational scenarios for an ANTS application in a low gravity surface.

**Introduction**: Basic structural compo05 11:08 PMTo: commentsSubject: fair tax for all Advnents would erse Tax Consequences for Same-Sex Couples 1.Health , as in other applications, be highly modular, addressable arrays of more robust than Zero G carbon NEMS-based nodes, from which highly morphable struts, tethers, 2D mesh, and 3D fabric could be reversibly deployed for various functions. Individual craft would be releasedInsurance for Partners - A Taxing Proposition: Empl, possibly by a human crew on or near the Moon or from an unmanned facility. Individual craft would be capable of landing on a low G surface, using a miniaturized version of high impulse thruster technology, transforming into rovers, antennas, oyees payincome and payroll tax on the health insuraor more specialized service providers, as needed, and ultimately taking off to return to the point of release.

**Methodology**: Wnce premiums their employers provide for domestic pae have developed preliminary conceptual and physical models of spacecraft and components and models of the interaction of ANTS at the spacecraft level in order to determine hardware and software requirements for typical operations driven by operating on a low gravity surface to support a human crew.

**Discussion**: As in the other applications of the ANTS architecture, movement would not employ wheels, which work best in a special environment. Instead, the ANTS approach harnesses the effective skeletal/ muscular system of the frame itself to enable more ‘natural’ movertners who do not otherwise qualify as dependents. Bment, effectively allowienefits for different-sex spouses are not subject tong ‘flow’ across a surface or into a particular morphological form. As rovers, craft would be equipped for exploring, prospecting, monitoring, as required. Craft could individually or collectively form cylindrical or bowl shaped arrays to act as antennas, for communication or astronomical observatories. The architecture would also be useful in the construction of tools and structures for human occ this tax. 2.Flexible Spending Accounts Not So Flexiupation of permanent bases. ANTS structures, operating contible: Employees can useflexible spending accounts tonuously or on demand, could be thus used for exploration, reconnaissance, pay for a different-sex spouse's medical expenses, communication, navigation, transportation, construction, permanent moniincluding eyeglasses, prescriptions, and co-pays, ontoring, or observation, protecting human crews and facilitating their work.

**Conclusions:**  The ANTS architecture is a promising approach for supporting human crew activities on the surface of the Moon or Mars as part of the new NASA iniativ a pre-tax basis. These accounts cannot be used for e.

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