Center for Space Engineering Research

Distinguished Center

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Established as a center in 1986. This center is Utah's leader for new technology developments involving space remote and in-situ sensing systems, image compression technology and small satellite systems. Sensing equipment developed at the center was the primary experimental effort on a recent shuttle mission. Besides creating six private companies, the center's research benefits many commercial space-oriented firms in Utah. Received "Distinguished Center" Status in 1991.

Overview		Technologies	Status	Economic Impact
Current State Contract	-	*Infrared instrumentation *Sensor calibration *Upper atmosphere measurements & modeling *Plasma diagnostics *Data analysis *Image compression technology *Cryogenic systems *Program management *New technology developments in space remote and in-situ sensing systems *Storage of medical imagery *Anticipating NASA contract for a commercial remote sensing small satellite *Satellite - borne imaging systems for commercial and military applications *Video phones and direct satellite broadcast TV *Contracted to develop "Micro Satellites" from McDonnell Douglas *Small Satellite control systems *Small Spacecraft Systems	*Increased annual operating budget to $20 M *Successfully competed to win $20 M contract for critical SDI satellite (1992 launch) *Now host nationally recognized annual small satellite conference *Have flown 350 payloads, 75 of which involved cryogenics *Have become a space grant university with U of U, BYU & Denver U.	*Image compression technology demonstration will facilitate new concept in video phones(market size equal to VCR's) *A total of 23 jobs now being directly supported by projects resulting from this center. *Serving as a nucleus for developing further expansion in the space industry in Northern Utah. *Development of space cryogenic technology promises expansion in economic opportunities *Tremendous success of the CIRRIS 1A experiment aboard the space shuttle Discovery promises increased business opportunity as Dept of Defense Market becomes more competitive
Matching Funds	$1,478,688			
Cumulative	$7,449,842			
Industry Jobs Created	284			
Center Related Jobs	21			
Spinoff companies	6			
Patents Applied	4			
Patents Issued	1			
License Agreements	7			