Office of Aeronautics and Space Technology

### UNIVERSITY PROGRAM

Presentation to

AIAA/OAST Conference on Space Technology

Steven C. Hartman Program Manager September 12, 1988

#### SPACE R&T STRATEGY

REVITALIZE TECHNOLOGY FOR LOW EARTH ORBIT APPLICATIONS

DEVELOP TECHNOLOGY FOR EXPLORATION OF THE SOLAR SYSTEM

MAINTAIN FUNDAMENTAL R&T BASE

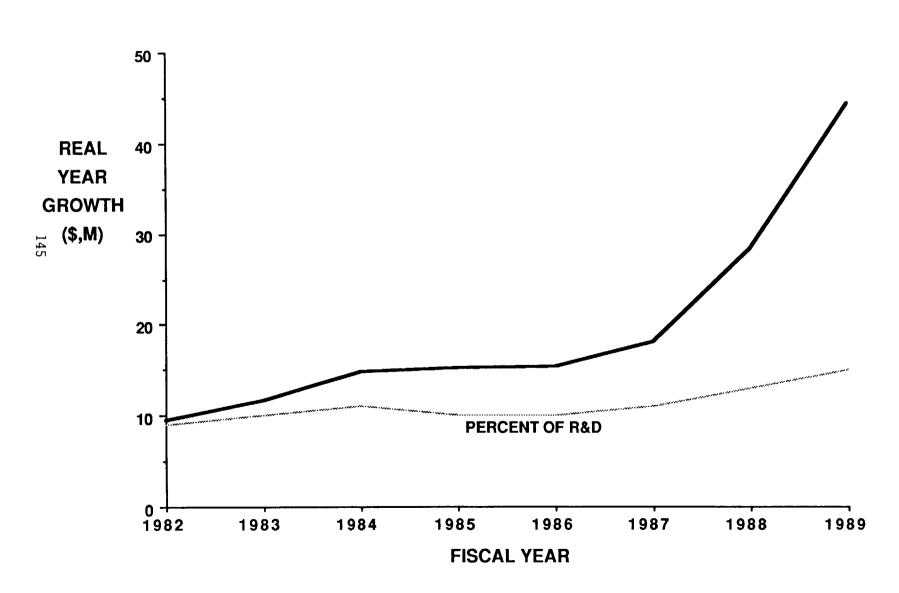
BROADEN PARTICIPATION OF UNIVERSITIES

EXTEND TECHNOLOGY DEVELOPMENT TO IN-SPACE EXPERIMENTATION

FACILITATE TECHNOLOGY TRANSFER TO USERS

### OAST UNIVERSITY PROGRAM GROWTH (SPACE)





#### **OAST UNIVERSITY PROGRAMS**

**BASIC RESEARCH GRANTS** 

RESEARCH INSTITUTES

**JOINT UNIVERSITY INSTITUTES** 

CENTERS OF EXCELLENCE

**AEROSPACE ADVANCED DESIGN PROGRAM** 

HYPERSONIC TRAINING AND RESEARCH PROGRAM

STATION UTILIZATION - TECHNOLOGY OUTREACH

GRADUATE PROGRAM IN AERONAUTICS

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

BROADEN THE CAPABILITIES OF THE NATION'S ENGINEERING COMMUNITY TO PARTICIPATE MORE EFFECTIVELY IN THE U.S. CIVIL SPACE PROGRAM

#### **OAST UNIVERSITY PROGRAMS**

#### WHAT WE ARE DOING DIFFERENTLY:

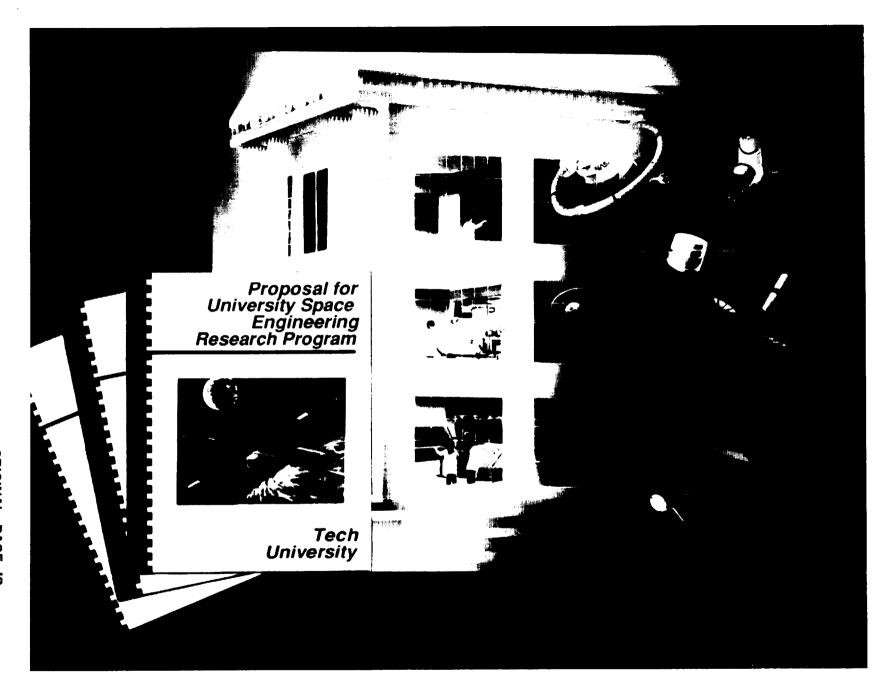
MORE EFFICIENT USE OF ANNOUNCEMENTS OF OPPORTUNITY

INDEPENDENT OPPORTUNITIES TO CONTRIBUTE INNOVATIVELY

PEER REVIEW

LONG-TERM FUNDING

STRONGER INDUSTRY/UNIVERSITY PARTNERSHIPS WITH NASA



0AST

GRANTS UP TO \$1-2M PER YEAR FOR A MINIMUM OF 4 YEARS

FLEXIBLE SO UNIVERSITIES ARE FREE TO BE INNOVATIVE

CENTER CONCEPT FOR MULTI-DISCIPLINARY RESEARCH AND EDUCATION

COLLABORATIVE ACTIVITY INVOLVING NASA CENTERS AND INDUSTRY

FUNDING SUPPORT TO U.S. STUDENTS ONLY

#### **CRITERIA:**

STRENGTH OF EXISTING ENGINEERING PROGRAM

QUALITY OF THE PROPOSED SPACE RESEARCH

POTENTIAL IMPACT

MANAGEMENT AND COMPETENCE

**GROWTH POTENTIAL** 

#### OAST

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#### **EVALUATION PROCESS**

- PEER REVIEW
  - -- EACH PROPOSAL ASSIGNED 5 REVIEWERS
  - -- RESEARCHERS FROM NASA, INDUSTRY, UNIVERSITIES, OTHER GOVERNMENT AGENCIES
- STEERING COMMITTEE
  - -- STANDARDIZED REVIEW OF ALL PROPOSALS
  - -- WORKING GROUP INTERMEDIATE PROCESS
  - -- SITE VISITS
  - -- RECOMMEND SELECTIONS
- SELECTION OFFICIAL

### UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

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#### **NINE CENTERS SELECTED FOR FY 1988**

- UNIVERSITY OF ARIZONA CENTER FOR UTILIZATION OF LOCAL PLANETARY RESOURCES
- UNIVERSITY OF CINCINNATI HEALTH MONITORING TECHNOLOGY CENTER FOR SPACE PROPULSION SYSTEMS
- UNIVERSITY OF COLORADO, BOULDER CENTER FOR SPACE CONSTRUCTION
- UNIVERSITY OF IDAHO VERY LARGE SCALE INTEGRATED HARDWARE ACCELERATION CENTER FOR SPACE RESEARCH
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY CENTER FOR SPACE ENGINEERING RESEARCH FOCUSED ON CONTROLLED STRUCTURES TECHNOLOGY
- UNIVERSITY OF MICHIGAN CENTER FOR NEAR-MILLIMETER WAVE COMMUNICATION
- NORTH CAROLINA STATE AT RALEIGH & NORTH CAROLINA

  AGRICULTURAL AND TECHNICAL STATE UNIVERSITY MARS MISSION RESEARCH CENTER
- PENNSYLVANIA STATE UNIVERSITY CENTER FOR SPACE PROPULSION ENGINEERING
- RENSSELAER POLYTECHNIC INSTITUTE INTELLIGENT ROBOTIC SYSTEMS FOR SPACE EXPLORATION

#### *OAST*

#### **COLLABORATIVE ACTIVITIES:**

**EXCHANGE OF PERSONNEL** 

**FACILITY USE** 

STUDENT RESEARCH

**ADVISORY SERVICES** 

**TECHNICAL EXCHANGES** 

ETC.

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