

SUPPLEMENTAL AGREEMENT
BETWEEN
COLORADO STATE UNIVERSITY
AND
THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 1st day of January , 1979, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES NUCLEAR REGULATORY COMMISSION (hereinafter referred to as the "Commission"), and COLORADO STATE UNIVERSITY (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the parties desire to modify Contract No. NRC-04-76-236 as hereinafter provided, and this supplemental agreement is authorized by law, including the Energy Reorganization Act of 1974, as amended, and the Atomic Energy Act of 1954, as amended.

NOW, THEREFORE, said contract is hereby modified as follows:

1. Appendix A, attached to this supplemental agreement and made a part hereof, provides for the research to be performed by the Contractor during the contract period specified therein.
2. In Article II - The Period of Performance, the date " December 31, 1979 " is substituted for the date " December 31, 1978 ".
3. In Article III - Consideration, the sum "\$208,000.00" is substituted for the sum "\$153,001.00".

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA

BY: [Signature]
Kellogg V. Morton, Chief
Research Contracts Branch
(title)

Nuclear Regulatory Commission

COLORADO STATE UNIVERSITY

BY: [Signature]
GEORGE G. OLSON
Vice President For Research
(title)

I, Jeane M. Cole, certify that I am the
(attester)
Asst. Secretary of the Contractor named
(title)
under this document; that George G. Olson
(signatory)

who signed this document on behalf of said Contractor was then
Vice President for Research of said Contractor; that
this document was duly signed for and on behalf of said Contractor by
authority of its governing body and is within the scope of its legal
powers.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of
said Contractor.

[Signature]
Jeane M. Cole, Asst. Secretary
STATE BOARD OF AGRICULTURE

(SEAL)

POOR ORIGINAL

CONTRACTOR: COLORADO STATE UNIVERSITY

APPENDIX A

For the Contract period January 1, 1979 through December 31, 1979

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

(a) The unclassified scope of work entitled "Wind Tunnel Measurements of Dispersion and Turbulence in the Wakes of Nuclear Reactor Plants" under this contract No. NRC-04-76-236 is as follows:

1. Determine quantitatively the character and persistence of the wake regions behind large reactor size buildings.
2. Develop appropriate empirical formulation of building wake diffusion generalizing the results of the experimental analysis where possible.
3. Determine quantitatively the character of unstable internal boundary layers developed during flow over warm surfaces.

(b) The Principal Investigator expects to devote the following approximate amount(s) of time to the contract work:

R. N. Meroney: 100% of his time for 2 months
J. A. Peterka: 100% of his time for 2 months

ARTICLE A-II WAYS AND MEANS OF PERFORMANCE

(a) Items for which support will be provided as indicated in A-III, below

(1) Salaries and Wages	\$ <u>25,221.00</u>
(2) Equipment to be purchased or fabricated by the Contractor	\$ <u>-0-</u>

(3) Travel	\$ <u>900.00</u>
(i) Domestic	
(ii) Foreign	\$ <u>-0-</u>

(4) Other direct costs including PERA (Public Employees Retirement Association) and other fringe benefits.

(5) Indirect costs based on a predetermined rate of 56.6 percent applicable to salaries, wages, and PERA.

- (b) Items, if any, significant to the performance of this contract, but excluded from computation of Support Cost and from consideration in proportioning costs:

NONE

- (c) Time or effort of Principal Investigator(s) including indirect costs and fringe benefits contributed by Contractor but excluded from computation of Support Cost and from consideration in proportioning costs:

NONE

Article A-III

The total estimated cost of items under A-II(a) above for the contract period stated in this Appendix A is \$54,999.00 ; the Commission will pay 100 percent of the actual costs of these items incurred during the contract period stated in this Appendix A, subject to the provisions of Article III and Article B-XXVIII. The estimated NRC Support Cost for the contract period stated in this Appendix A is \$54,999.00 .

The estimated NRC Support Cost is funded as follows:

- | | |
|---|---------------------|
| (a) Estimated unexpended balance from prior period(s) | \$ <u>-0-</u> |
| (b) New funds for the current period | \$ <u>54,999.00</u> |
| (c) The new funds being added in A-III(b) constitute the basis for advance payments provided under Article B-X. | |