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ABSTRACT

The Committee on Academic Science and Engineering (CASE), now defunct, established the CASE reporting system in 1965 to collect data on the Federal Government's obligations to universities, colleges, and other nonprofit organizations. The National Science Foundation, who has responsibility for the CASE system, uses the data for preparing annual reports to the Federal Council on Science and Technology and to the President and Congress. This instructional guide provides information about CASE reporting requirements, including the report and its coverage, special submission requirements, data input formats, element definitions, and codes in order to assist preparers in submitting their reports properly and in a timely manner to the Department of Health and Human Services. (GLR)

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CASE

Instructions and Data Specifications

Volume 1

November 1989

for reporting
DHHS Obligations
to Institutions of
Higher Education
and
Other Nonprofit
Organizations

FY 1989

Prepared by:

Program Analysis Branch
Division of Program Analysis
Office of the Associate Director
for Science Policy and Legislation
Office of the Director
National Institutes of Health



TABLE OF CONTENTS

			Page
BACKGROU	סמע	•	1
GENERAL	INSTE	RUCTIONS	1
			•
I.	Res	sponsibilities	1
	A. B.	DHHS CASE Coordinator DHHS Agency Coordinator	1 2
II.	The	Report and Its Coverage	2
	Α.	Reporting Period and Due Date	2
	В.	Obligations to be Reported	2
	c.	Categories of Obligations	2
	D.	Beneficiary Institutions	2
	٠.	bonesiciary inscitutions	4
III.	Spe	cial Submission Requirements	3
	A.	Double Reporting of Health	
	_	Professional Schools	3
	В.	Fields of Science	3
	C.	Interagency Transfer of Funds	4
	D.	Rounding of Data	4
	E.	Compatibility with Other Reports and	
		Reconciliation of Differences	4
IV.	Dat	a Specifications and Definitions	5
	A.	Magnetic Tape Data	5
	В.	Record Formats	6
	C.	Definitions of Data Elements	7
REMINDER	s	•••••	17
APPENDIX	A.	DHHS Agency Codes	18
APPENDIX	В.	Field of Science Codes and Definitions	21
TAPE TOE	NTTET	CATION FORM	



INSTRUCTIONS AND DATA SPECIFICATIONS FOR REPORTING DHHS OBLIGATIONS TO INSTITUTIONS OF HIGHER EDUCATION AND OTHER NONPROFIT ORGANIZATIONS, FY 1989

BACKGROUND

CASE stands for "Committee on Academic Science and Engineering" of the Federal Council on Science and Technology (FCST). The Committee established the CASE reporting system in 1965 to collect data on the Federal Government's obligations to universities, colleges, and other nonprofit organizations. The data are used for preparing annual reports to the FCST, and to the President and Congress.

In 1973, responsibility for the CASE reporting system was transferred to the National Science Foundation (NSF), and although the Committee no longer exists, the term has continued in use. DHHS will continue to collect information in greater detail than required by the NSF to facilitate preparation of executive summary reports for internal management use, and other analytical and reference reports.

It is essential for the Department to meet its reporting deadline because DHHS accounts for a large percent of the Federal funds obligated to institutions of higher education and other nonprofit organizations. Your cooperation in assuring a comprehensive, accurate, and timely submission for FY 1989 will be greatly appreciated.

GENERAL INSTRUCTIONS

I. Responsibilities

A. DHHS CASE Coordinator. William E. Rhode, Ph.D., Economic and Resource Studies Branch, Division of Program Planning and Evaluation, OSPL, OD, NIH, has been designated as the DHHS Coordinator for CASE reporting. He has been assigned the responsibility by the Assistant Secretary for Health for (1) collecting the data from all DHHS agencies, (2) preparing the required submission to the National Science Foundation, and (3) providing data for analytical reports depicting trends in the flow of DHHS funds to institutions of higher education and selected categories of nonprofit institutions. Each agency within the Department through its assigned coordinator will provide data for the CASE report.

The day to day operations of the CASE Survey will be conducted under a contract. Ms. Janet Healy will be the Project Officer, and may be contacted on 496-4418 with questions.



B. DHHS Agency Coordinator. Each agency coordinator is responsible for verifying and submitting, or arranging for submission, all data for his agency. This may include data from the IMPAC system, the GDS system, the agency's own award r .ords, or any combination of these sources. The agency coordinator must, prior to submission, insure that the data are accurate and that they comply with all of the CASE reporting requirements. After the data have been reformatted by the Office of the DHHS CASE Coordinator, a summary table showing totals for each agency submission will be prepared. The agency coordinator will verify these 'Control Totals' and attest to their accuracy by returning a signed copy of the table.

II. The Report and Its Coverage

- A. REPORTING PERIOD and DUE DATE. Fiscal Year 1989 (October 1, 1988-September 30, 1989). Data should be submitted as soon as possible after the close of the fiscal year and NOT LATER THAN January 31, 1990.
- B. OBLIGATIONS TO BE REPORTED. Except as noted below, all obligations made by agencies of DHHS during the fiscal year to institutions of higher education (which offer at least a 2-year program of college Level studies in residence) and other nonprofit organizations are to be included in this report. All actual obligations made during the fiscal year should be reported regardless of when such funds are to be spent by the recipient. Agency support of Federal employee training and development activities and all other instances of indirect support are to be excluded, even though the final destination of such funds is known to be an institution of higher education or nonprofit organization.
- C. CATEGORIES OF OBLIGATIONS. Obligations are classified into 18 categories (plus two categories of loans), and each category is reported in a different field in the record. Field definitions, types of obligations, and guidelines for classifying obligations are summarized below.
- D. BENEFICIARY INSTITUTIONS. There are 19 different types of recipient or beneficiary institutions to be covered by the DHHS CASE report.

Type Code (first 2 digits of institution code)

- 1. Institutions of higher education 00, 01, or 02
- 2. Health professional schools:

(a)	Medical schools and schools of osteopathy	11
(b)	Dental schools	12
(c)	Schools of public health	13
(d)	Schools of allied health sciences	14
(e)	Schools of veterinary medicine	15
(f)	Schools of nursing (excluding those under	
	5(e) and 5(f) below)	16
(g)	Schools of pharmacy	17
(h)	Schools of optometry	18
(i)	Schools of podiatry	19



3.	R&D centers	managed	by	institutions	of	higher	
	education	_	-			 _ .	

90

4. Nonprofit organizations:

(a)	and a property of the contractions,
	AND R&D centers managed by nonprofit instit tions (excluding those managed by colleges and universities)

21

(b) Other nonprofit organizations--this category is to be reported by State, rather than name of organization; and only R&D obligations, science training grants and fellowships, and general support for science should be reported

25

5. Independent nonprofit hospitals (Teaching = member of Council of Teaching Hospitals; affiliated = affiliated with a medical school):

(a)	Teaching-affiliated	30
(b)	Teaching-nonaffiliated	31
(c)	Nonteaching-nonaffiliated	32
(d)	Nonteaching-affiliated	33
(e)	Hospital schools of nursing	34
(f)	Independent schools of nursing	35

III. Special Submission Requirements

- A. DOUBLE-REPORTING OF HEALTH PROFESSIONAL SCHOOLS. All obligations for the 9 types of health professional schools should be reported TWICE on 1A records--once in a record coded explicitly to the health professional school, and again as part of the total obligations to the parent university (see Record Formats on p. 7). Note that an independent medical school would be reported both as a medical school and as an institution of higher education. This double-reporting requirement on 1A records applies only to health professional schools--not to any other type of beneficiary institution.
- B. FIELDS OF SCIENCE (see Appendix B on p. 22 for code:). Fields of science must be reported on 2A records for obligations to institutions of higher education in the following eight categories of support:
 - 1. Science-related R&D Project Grants
 - 2. Science-related R&D Project Contracts
 - 3. Science-related R&D Project Cooperative Agreements
 - 4. Science-related R&D Resources Grants
 - 5. Science-related R&D Resources Contracts
 - 6. Science-related R&D Resources Cooperative Agreements
 - 7. Science Training Grants
 - 8. Science Fellowships



Field of science codes are reported on type "2A" records only. A separate 2A record should be used for each field of science for a given university. The totals of each of the categories in the 2A records should be equal to the totals in the corresponding categories of the 1A record.

It is not necessary to report fields of science (or to submit 2A records) for other categories of obligations to institutions of higher education, nor is it necessary to report fields of science (or to submit 2A records) for any obligations to other types of beneficiary institutions.

- C. INTERAGENCY TRANSFER OF FUNDS. In cases of interagency transfer of funds, the agency which actually obligates the funds to the beneficiary institution should report the obligation.
- D. ROUNDING OF DATA. Obligations should be reported in terms of thousands of dollars, rounded to the nearest thousand dollars. All obligations reported should be right-justified and zero filled. For example, an obligation of \$51,500 should be entered as 00052. Obligations of less than \$500 on individual projects should be summed. When they total \$500 or more in one of the reportable categories for an institution of higher education or other nonprofit organization, they should be rounded to the nearest \$1000 and so reported. In cases where each field of science is less than \$500, report the entire amount for the activity under the field of science receiving the largest amount. This will insure that the amount reported for an institution of higher education on 1A and on 2A records will be the same.
- E. COMPATIBILITY WITH OTHER REPORTS AND RECONCILIATION OF DIFFERENCES.
 - 1. NSF Survey, "Federal Funds for Research, Development, and Other Scientific Activities": Certain data reported for CASE must be reconciled with the corresponding amounts to be reported for the NSF "Federal Funds" Survey, which has a reporting deadline in February. The combined totals for R&D projects and R&D resources must equal the NSF R&D figure, and R&D plant must equal the NSF R&D plant; the institutional categories for which agreement is expected are (1) institutions of higher education, (2) R&D centers (FFRDC's) managed by institutions of higher education, and (3) R&D centers managed by nonprofit institutions. 1/



^{1/} Agreement is expected for totals reported. The only differences that may occur are because of interagency transfer of funds. For CASE reporting, the agency which received the transfer from another agency and then actually distributed the funds to the recipient institution will report the obligations. Such transfers must be trackable on a project-level basis.

- 2. OMB Exhibit 44: This office will use Exhibit 44 data as a comparability check. While exhibit 44 requires that R&D obligations to institutions of higher education be reported by the originally obligating agency, all other figures should be identical.
- 3. NIH Survey, "Federal Obligations for Medical and Health-Related R&D": This biennial survey is conducted in even numbered years and collects three years of data each time that it is performed. It requires reporting of health R&D funds, which are among the obligations also required by the NSF "Federal Funds" report and the CASE report. Figures reported for each of these surveys must be consistent.
 - a. Public Health Service Agencies and HCFA. The deadlines for the NSF report and the NIH report are the same. The overall totals for R&D data should be identical, because all of the R&D reported by these agencies is health related. The NIH survey uses certain data directly from the CASE survey for PHS agencies and HCFA, so the only permissable differences between the CASE report and the NIH survey are interagency transfers.
 - b. Other DHHS agencies. CASE R&D figures for institutions of higher education, medical and osteopathy schools, and FFRDC's administered by institutions of higher education may include R&D other than health related R&D. Therefore totals must be equal to or greater than those reported for health R&D on the NIH survey.

IV. Data Specifications and Definitions

- A. MAGNETIC TAPE DATA. Each DHHS agency coordinator will submit data with records arranged in the formats specified below. Agencies not able to produce magnetic tape records should contact the DHHS Coordinator for CASE reporting for special instructions. The submission must be accompanied by a Tape Identification Form (inside back cover) and a printout of the data. The tape should be in sequence by record type, DHHS agency code, recipient institution code, and field of science code.
 - 1. The tapes submitted must be compatible with the NIH Computer Center's IBM equipment. IBM standard labeled 3480 cartridge tapes are preferred.
 - 2. The logical record length of all tape records is 117 positions. A blocking factor of 52 is recommended, which will give a block length of 6,084 positions. A completed copy of the Tape Identification Form (inside back cover) must accompany each tape submitted.



B. RECORD FORMATS

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RECORD TYPE 1A (INSTITUTIONAL OBLIGATIONS). These records should contain DMHS obligations by each constituent obligating agency of DMHS to each recipient institution of the types listed under Beneficiary Institutions, above. The records must conform to the specified format.

Obligations to health professional schools should be reported twice--once in records coded explicitly to the health professional school and again as part of the obligations to the parent institution of higher education. Note that an independent medical school would be reported both as a medical school and as an institution of higher education.

Obligations entered for each of these fields must equal the sum of the entries in the corresponding fields of Type 2A records for the same institution of higher education.

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RECORD TYPE 2A (FIELDS OF SCIENCE). Type 2A records should be submitted for DHHS obligations to institutions of higher education only and only for the specified types of obligations. The format is specified above.

For each institution of higher education for which a 1A record is generated, data reported for R&D Grants, Contracts, and Cooperative Agreements, Science Training Grants, or Science Fellowships must be broken down by field of science in as many 2A records as are needed to account for the corresponding 1A totals. There should be a separate 2A record for each field of science for that institution of higher education. Field of science codes may be found in Appendix B.

Field definitions and explanations of the types of obligations to be reported in each of the fields follow.



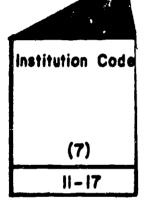
C. DEFINITIONS OF DATA ELEMENTS

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Agency Code (6) 5-10

AGENCY CODE: Enter on each record, in position 5-10, the code of the DHHS agency which awarded the obligation. These codes are listed in Appendix A.

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INSTITUTIONS AND NONPROFIT ORGANIZATIONS: Currently active institution codes may be found in Volume II (CASE Code Book) of these instructions. Obligations must be reported separately for each recipient institution of the types enumerated above, except for the residual "other nonprofit organizations." Only codes listed for institutions of higher education and other nonprofit organizations in Volume II of these instructions will be accepted. DHHS Agencies having data to report for an institution of higher education or nonprofit organization of the specific types listed in Volume II but not included among those listed should contact the Office of the DHHS Coordinator for CASE reporting (telephone 496-9291) for appropriate action.

Certain types of "other nonprofit organizations" such as (1) museums, (2) scientific societies, (3) zoos, (4) health maintenance organizations, (5) community health centers, (6) comprehensive health care centers, (7) drug abuse and alcoholism centers, (8) community mental health centers, (9) maternal and child health centers, (10) government owned hospitals and other nonprofit organizations that are not a part of (1) health professional schools (2) hospitals, or (3) other institutions or organizations separately enumerated in Volume II of these instructions, were not assigned a specific code for each organization but were grouped together under a common code 25 category—"other nonprofit organizations." These organizations should be reported by their respective State codes (see codes for position 11-17 in Volume II for "other nonprofit organizations").

NOT ALL CATEGORIES OF OBLIGATIONS ARE REQUIRED TO BE REPORTED FOR "OTHER NONPROFIT ORGANIZATIONS." Obligations for R&D (including grants, contracts, cooperative agreements and plant), science training and fellowships, and for general support for science must be reported, but other types of obligations should not be reported.



Please note that codes are provided for university systems (e.g., City University of New York System Office, CUNY) as well as the individual institutions within the system. Insofar as possible, do not report avards to the system's office when it is possible to identify and distribute the awards among the component campuses.

Report obligations in terms of the institutions or organizations receiving the support. Funds transferred from one institution or organization to another should be reported under the first institution or organization receiving the DHHS funds. Obligations that flow to a university or college organization acting as a fiscal agent for the institution are to be reported in terms of the parent university or college. For example, obligations awarded to the Purdue Research Foundation (fiscal agent for the university) should be reported under Purdue University.

RESEARCH AND DEVELOPMENT: These fields will include obligations for research and development as defined in the annual instructions for the "Federal Funds" surveys. Excluded, however, are NIH awards for the general support of science, such as the Biomedical Research Support Grant, the Biomedical Sciences Support Grant, the Health Sciences Advancement Awards, and the Minority Biomedical Support Grant which are to be reported only by NIH on record type 1A, in position 53-57. Obligations for R&D are to be subdivided into six categories:

R and D Project Grants (5) (8) (8) (8) (8) (8) (8) (8)																
Column C	RECORD DENTIFICATION OF	LIGATIONS FOR SCI	ENCE AND E	NGINEE	RING			NONS	CIENCI	E OBLI	GATIO	NS	LO	MNS	SCI.	Cent'd
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R and D Project Grants (5) 18-22 (IA)					·		1		i	1	ļ	ł	ļ	1]
R and D Project Grants (5) (5) (8-22 (IA) R and D Project Contracts (5) 23-27 (IA)	(m) (s) (n) (n) (n)	14 14 14			w	89	_	•	<u> </u>							(6)
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		Project Grants (5)						Pro Con	ojec trac (5)	†						
'		18-22 (2	(A)				7	3-	27	(2A)						

SUPPORT FOR R&D PROJECTS THROUGH GRANTS AND CONTRACTS. Report support for R&D project grants on record type 1A, position 18-22, and R&D project contracts on record type 1A, position 23-27. When R&D projects are reported for an institution of higher education, the 1A record must have one or more companion 2A records showing the amounts awarded for the grants and contracts by field of science. THE TOTAL OF THE AMOUNTS REPORTED ON 2A RECORDS BY FIELD OF SCIENCE FOR THESE CATEGORIES MUST EQUAL THE TOTAL REPORTED ON RECORD 1A IN POSITIONS 18-22 and 23-27.



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SUPPORT FOR R&D RESOURCES THROUGH GRANTS AND CONTRACTS. This includes grants and contracts for strengthening research resources such as clinical research centers, primate and animal research centers, biomedical engineering centers, environmental health centers, germ-free laboratories, culture collections, enzyme and biopolymer resource laboratories, toxicology and biochemical pharmacology centers, child health and mental retardation research centers, and other comparable arrangements for specialized research environment. Include fund used for construction, training, and related activities, unless such activities are separately funded and properly belong under other categories of construction, training, etc. Report on record type 1A, support for R&D resource grants (position 28-32) and R&D resource contracts (position 33-37). R&D resources reported for an institution of higher education on a 1A record must have one or more companion 2A records showing the amounts awarded for the grants and contracts by field of science. Where R&D resource support is of a multidisciplinary or interdisciplinary character, the field of science should be coded 99, OTHER SCIENCES, NEC. THE TOTAL OF THE AMOUNTS REPORTED ON 2A RECORDS RY FIELD OF SCIENCE FOR THESE CATEGORIES MUST EQUAL THE TOTAL REPORTED ON THE 1A RECORD IN POSITIONS 28-32 and 33-37.

SUPPORT FOR R&D PROJECTS AND RESCURCES THROUGH COOPERATIVE AGREEMENTS. See page 16.



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R and D
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38-42

R&D PLANT. Report on record type 1A, in position 38-42, support for R&D Plant. Do not submit 2A records for R&D plant. R&D plant includes all projects whose principal purpose is to provide support for construction, acquisition, renovation, modification, repair, or rental of facilities, land, works, or equipment for use in scientific or engineering research and development. Included also are funds for maintenance and basic operations of such facilities and equipment. A facility is to be interpreted broadly to include any physical resource important to the conduct of research and development. All costs—direct, indirect, and related

expenditures—are to be included. In the event the R&D plant is part of a larger facility devoted to other purposes as well, the funds should (if possible) be allocated among all categories of support involved as appropriate. In general, the other categories that would be involved are construction of science facilities (position 58-62) and nonscience construction (position 73-77).

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Training Grants

(5)

43-47 (IA)

43-47 (2A)

SCIENCE TRAINING GRANTS. Report on record type 1A, in position 43-47, science training grant support. When scientific training grant support is provided to an institution of higher education, the 1A record must have one or more companion 2A records showing the amount awarded for scientific training by field of science. The total of the amounts reported on the 2A records by field of science for this category must equal the total reported on the 1A record in position 43-47. The 2A records are submitted for institutions of higher education only. Excluded here, and in science fellowships, are research institutes, seminars, and

conferences; educational institutes, seminars, and conferences; and the development of educational techniques or materials. These three types of activity are to be reported either under "all other science" (position 63-67) or "all other nonscience" (position 93-97).



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Construction

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58-62

CONSTRUCTION OF SCIENCE FACILITIES. Report on record type 1A, in position 58-62, all science-related construction that does not properly belong under R&D (projects or resources) or R&D plant. Basically, this includes all programs whose principal purpose is to provide support for construction, acquisition, renovation, modification, repair, or rental of facilities, and works or equipment for use in instruction in science or engineering. Included also are funds for maintenance and basic operation of such facilities and equipment. Where the institutional facility encompasses both science and nonscience activities, the funds should be allocated between positions 58-62 and 73-77.

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Other Science

(5)

83-67

ALL OTHER SCIENCE. Report on record type 1A, in position 63-67, all science activities that cannot meaningfully be assigned to one of the other science categories. This should include separately organized or separately funded science-related activities such as science teaching institutes, course improvement projects in science fields, operation of scientific and technical information systems, e.g., MEDLARS, regional search centers, and collection of scientific data. DO NOT REPORT ANY CONSTRUCTION UNDER THIS ITEM.

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Training & Fellowships

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68-72

NONSCIENCE TPAINING AND FELLOWSHIPS. Report on record type 1A, in position 68-72, all obligations for training grants, fellowships, traineeships, scholarships, work-study awards, and basic opportunity grants in nonscience fields. DO NOT INCLUDE ANY TRAINING OR FELLOWSHIP TYPE awards which fall within the fields of science and engineering listed in Appendix B.



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Fellowships

(5)

48-52 (IA)

48-52 (2A)

SCIENCE FELLOWSHIPS. Report on record type 1A, in position 48-52, scientific fellowship type support (i.e., scholarships, fellowships, traineeships, and similar awards). The total amount pertaining to such awards (stipends and cost-of-education allowances) will be reported in terms of the institution at which the recipient plans to do his research and/or study, unless an amount is paid separately to an individual's "home institution," in which case that amount should be reported in terms of the "home institution." Scientific fellowship type support reported at an institution of higher education on a 1A

record must have one or more companion 2A records showing the amounts awarded by field of science. The total of the amounts reported on the 2A records by field of science for this category must equal the total reported on the 1A record in position 48-52.

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General Support

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53-57

GENERAL SUPPORT FOR SCIENCE. Report on record type 1A, in position 53-57, the NIH general support for science awards. This category is limited to NIH awards such as the Biomedical Research Support Grant, the Biomedical Sciences Support Grant, the Health Sciences Advancement Awards, and the Minority Biomedical Support Grant. Formula grants, institutional support, and project grants to health professional schools should be reported under the institutional support category (position 88-92). Do not submit 2A records for this category of support.



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Construction

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73-77

NONSCIENCE CONSTRUCTION. Report on record type 1A, in position 73-77, construction awards to institutions of higher education under the Hill-Burton, Health Manpower Act and other construction programs, unless the entire facility is devoted to scientific activity. In case the facility is devoted to both scientific and nonscientific activity, the obligation should (if possible) be allocated among the appropriate categories.

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Child Development

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78-82

CHILD DEVELOPMENT. Report on record type 1A, in position 78-82, nonscience support for the educational, social, and physiological development of children, including headstart programs, maternal and child health services, child care services, etc. Science support for these objectives should be reported under appropriate science categories.

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Health Services

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83-87

HEALTH SERVICES. Report on record type 1A, in position 83-87, support for the delivery of health services, such as health maintenance organizations, community health centers, comprehensive health care centers, drug abuse and alcoholism centers, and community mental health centers. Maternal and child health services should be reported as child development, position 78-82. Report construction in support of such services as nonscience construction, position 73-77.



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Institutional Support

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88-92

INSTITUTIONAL SUPPORT. Report on record type 1A, in position 88-92, general institutional nonscience support of institutions of higher education and of health professional schools, including institutional grants to medical and other health professional schools, capitation grants, start-up assistance and financial distress grants, basic and special improvement grants, formula grants to schools of public health, and other institutional assistance awards authorized under the Comprehensive Health Manpower Training and Nurse Training Acts of 1971, and subsequent legislation.

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Other Nonscience

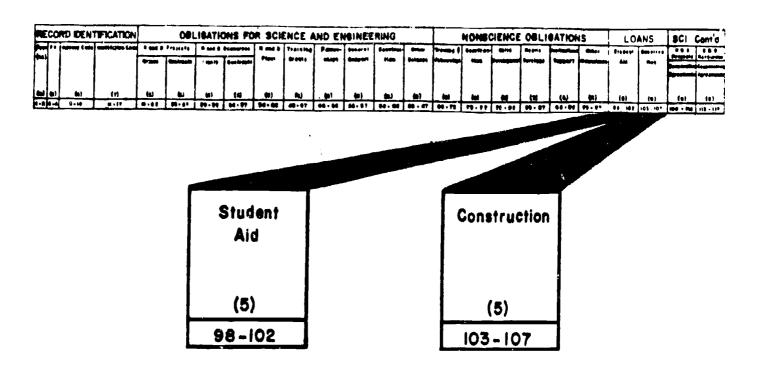
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93-97

ALL OTHER NONSCIENCE. Report on record type 1A, in position 93-97, obligations for all other nonscience activities, including:

- 1) regional medical programs,
- 2) comprehensive health planning,
- 3) Medicare,
- centers for the collection of general-purpose data of a nonscience nature,
- 5) nonscience information centers,
- 6) nonscience teaching institutes, and
- 7) nonscience course content improvement projects.



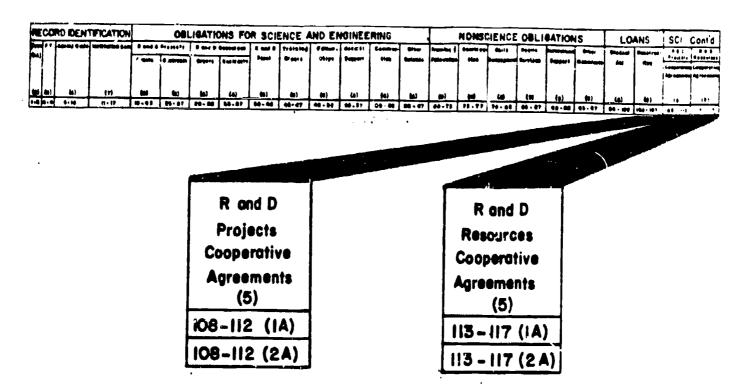


STUDENT AID LOANS. Report on record type 1A, in position 98-102, all student educational loans.

CONSTRUCTION LOANS. Report on record type 1A, in position 103-107, all construction loans.







SUPPORT FOR P&D PROJECTS THROUGH COOPERATIVE AGREEMENTS. Report support for R&D project cooperative agreements on record type 1A, in position 108-112. When R&D project cooperative agreements are reported for an institution of higher education, the 1A record must have one or more companion 2A records showing the amounts awarded for the cooperative agreements by field of science. THE TOTAL OF THE AMOUNTS REPORTED ON 2A RECORDS BY FIELD OF SCIENCE FOR THIS CATEGORY MUST EQUAL THE TOTAL REPORTED ON RECORD 1A IN POSITION 108-112.

SUPPORT FOR R&D RESOURCES THROUGH COOPERATIVE AGREEMENTS. This includes cooperative agreements for strengthening research resources, such as clinical research centers, primate and animal research centers, biomedical engineering centers, environmental health centers, germ-free laboratories, culture collections, enzyme and biopolymer resource laboratories, toxicology and biochemical pharmacology centers, child health and mental retardation research centers, and other comparable arrangements for specialized research environment. Include funds used for construction, training, and related activities, unless such activities are separately funded and properly belong under other categories of construction, training, etc. Report on record type 1A, support for R&D resources cooperative agreements in position 113-117. R&D resources reported for an institution of higher education on a 1A record must have one or more companion 2A records showing the amounts obligated for the cooperative agreements by field of science. Where R&D resource support is of a multidisciplinary or interdisciplinary character, the field of science should be coded 99, OTHER SCIENCES, NEC. THE TOTAL OF THE AMOUNTS REPORTED ON 2A RECORDS BY FIELD OF SCIENCE FOR THIS CATEGORY MUST EQUAL THE TOTAL REPORTED ON THE 1A RECORD IN POSITION 113-117.



21

REMINDERS

- A. Agency codes: Codes for reporting agencies may be found in Appendix A, page 18.
- B. Field of Science codes: See Appendix B, page 21. These codes must be reported for obligations if they went to institutions of higher education for R&D Grants, Contracts, and Cooperative Agreements, and/or for Science Training Grants and Fellowships.
- C. Recipient Institutions: Codes for institutions of higher education and nonprofit organizations are listed in Volume II of these instructions. Please check the Code Book for additions, name changes, and/or deletions.
- D. Double Reporting of Health Professional Schools: Obligations to Health Professional Schools should be reported twice--once for the Health Professional School, and again for the parent university.
- E. Reporting Requirements for "Other" Nonprofit Organizations: Only R&D (projects grants, contracts, and cooperative agreements, resources grants, contracts, and cooperative agreements, and plant), science training and fellowships, and general support for science obligations are required for the "OTHER" nonprofit organizations. Totals are reported by State. Do not report Research Institutes, Operating Foundations, and R&D Centers managed by nonprofit organizations under this category.
- F. Tape Identification Form: See inside back cover. Please include one completed form for each magnetic tape reel submitted.
- 3. Submission due date is January 31, 1990. Address submission to:

William E. Rhode, Ph.D. DHHS Coordinator for CASE Reporting National Institutes of Health Building 31, Room 4C35 Bethesda, Maryland 20892



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038000	OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION (ASPE)
037802	OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH (OASH)
037820	National Center for Health Statistics
037830	National Center for Health Services Research
037890	OASH, all other
	NATIONAL INSTITUTES OF HEALTH
037102	Office of the Director, NIH
	RESEARCH INSTITUTES AND DIVISIONS
037112	Clinical Center
037114	Division of Computer Research and Technology
037122	Division of Research Grants
037123	Division of Research Resources
037124	Division of Research Services
037125	Fogarty International Center
037126	National Cancer Institute
037127	National Eye Institute
037128	National Heart, Lung, and Blood Institute
037130	National Institute of Allergy and Infectious Diseases
037131	National Institute of Arthritis and Musculoskeletal and Skin Diseas
037132	National Institute of Diabetes and Digestive and Kidney Diseases
037134	National Institute of Child Health and Human Development
037136	National Institute of Dental Research
037137	National Institute of Environmental Health Sciences
037138	National Institute of General Medical Sciences
037141	National Institute of Neurological Disorders and Stroke
037142	National Institute on Aging
037145	National Center for Nursing Research
037147	National Institute of Deafness and Communication Disorders
037170	National Library of Medicine
037190	NIH, all other



HEALTH RESOURCES AND SERVICES ADMINISTRATION

039200	Office of the Administrator, HRSA
	BUREAU OF HEALTH PROFESSIONS
039204	Division of Associated & Dental Health Professions
039206	Division of Medicine
039208	Division of Nursing
039210	BHPR, all other
	BUREAU OF HEALTH MAINTENANCE ORGANIZATIONS & RESOURCES DEVELOPMENT
039212	Division of Regulatory Activities
039214	Division of Planning Assistance and Assessment
039216	Division of Facilities Compliance
039218	Division of Facilities Conversion and Utilization
039220	National Health Planing Information Center
039222	Division of Facilities Financing
039224	Division of Energy Policy and Programs
039226	BHMO&RD, all other
039228	INDIAN HEALTH SERVICE
	BUREAU OF HEALTH CARE DELIVERY & ASSISTANCE
039230	Division of National Health Service Corps
039232	Division of Health Services Scholarships
039234	Division of Federal Employee Occupational Health
039236	BHCD&A, all other
039290	HRSA, all other



ALCOHOL. DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

037410	National Institute on Alcohol Abuse and Alcoholism
037412	National Institute on Drug Abuse
037414	National Institute of Mental Health
037490	ADAMHA, all other
	CENTERS FOR DISEASE CONTROL
037505	Office of the Center Director, CDC
037510	National Institute for Occupational Safety and Health
037515	Agency for Toxic Substances & Disease Registry
037520	CDC, all other
037700	FOOD AND DRUG ADMINISTRATION
034000	SOCIAL SECURITY ADMINISTRATION
	FOFFICE OF HUMAN DEVELOPMENT SERVICES
032010	Office of the Assistant Secretary, OHDS
032020	Administration for Children, Youth and Families
032040	Administration for Native Americans
032050	Administration on Aging
032055	Auministration on Developmental Disabilities
032099	OHDS, all other
	HEALTH CARE FINANCING ADMINISTRATION
031010	Office of Research, Demonstrations and Statistics
031015	Office of Management and Budget
031032	Bureau of Support Services
031040	Health Standards and Quality Bureau
031090	HCFA, all other



APPENDIX B. FIELD OF SCIENCE CODES AND DEFINITIONS (Use with 2A records)

Code	PHYSICAL SCIENCES
11	Astronomy
12	Chemistry
13	Physics
19	Physical sciences, not elsewhere classified (NEC)*
	MATHEMATICS AND COMPUTER SCIENCES
21	Mathematics
22	Computer sciences
29	Mathematics and computer sciences, NEC*
	ENVIRONMENTAL SCIENCES (TERRESTRIAL & EXTRATERRESTRIAL)
31	Atmospheric sciences
32	Geological sciences
33	Oceanography
39	Environmental sciences, NEC*
	ENGINEERING
41	Aeronautical
42	Astronautical
43	Chemical
44	Civil
45	Electrical
46	Mechanical
47	Metallurgy and materials
49	Engineering, NEC*
	LIFE SCIENCES
51	Biological sciences
54	Environmental biology
55	Agricultural sciences
56	Medical sciences
59	Life sciences, NEC*
	PSYCHOLOGY
61	Biological aspects
62	Social aspects
69	Psychological sciences, NEC*
	SOCIAL SCIENCES
71	Anthropology
72	Economics
73	History
74	Linguistics
75	Political science
76	Sociology
79	Social sciences, NEC*
99	OTHER SCIENCES, NEC**

^{*}To be used for multidisciplinary projects within the primary field and for single discipline projects for which a separate discipline code has not been assigned.

^{**}To be used for multidisciplinary and interdisciplinary projects which cannot be classified within a primary field.



Field of Science Codes and Definitions

CODE

Physical sciences are concerned with the understanding of the material universe and its phenomena. They comprise the fields of astronomy, chemistry, physics, and r-hysical sciences not elsewhere classified. Examples of disciplines under each of these fields are

- 11 Astronomy: laboratory astrophysics; optical astronomy; radio astronomy; theoretical astrophysics; X-ray, Gamma-ray, neutrino astronomy.
- 12 Chemistry: inorganic; organo-metallic; organic; physical.
- 13 Physics: acoustics; atomic and molecular; condensed matter; elementary particles; nuclear structure; optics; plaama.
- 19 Physical sciences, n.e.c.*

Mathematical and computer sciences employ logical reasoning with the aid of symbols and are concerned with the development of methods of operations employing such symbols. They comprise the following two subcategories:

- 21 Mathematics: algebra; analysis; applied mathematics; foundations and logic; geometry; numerical analysis; statistics; topology.
- 22 Computer sciences: computer programming; computer and information sciences (general); design, development, and application of computer capabilities to data storage and manipulation; information sciences and systems; systems analysis.
- 29 Mathematical and computer sciences, n.e.c.*

Environmental sciences: (terrestrial and ext. aterrestrial) are concerned with the gross nonbiological properties of the areas of the solar system that directly or indirectly affect man's survival and welfare; they comprise the fields of atmospheric sciences, geological sciences, oceanography, and environmental sciences not elsewhere classified. Note that all obligations in support of oceanography, whether physical or biological, are now to be reported under field 33. Examples of disciplines under each of these fields are

- 31 Atmospheric sciences: aeronomy; solar; weather modification; extraterrestrial atmospheres; meteorology.
- 32 Geological sciences: engineering geophysics; general geology; geodesy and gravity; geomagnetism; hydrology; inorganic geochemistry; isotopic geochemistry; organic geochemistry; laboratory geophysics; paleomagnetism; paleontology; physical geography and cartography; seismology; soil sciences.
- 33 Oceanography: biological oceanography; chemical oceanography; geological oceanography; pk sical oceanography; marine geophysics.
- 39 Environmental sciences, n.e.c.

Engineering is concerned with studies directed toward developing engineering principles or toward making specific scientific principles usable in engineering practice. Engineering is divided into eight fields: seronautical, astronautical, chemical, civil, electrical, mechanical, metallurgy and materials, and engineering not elsewhere classified. Examples of disciplines under each of these fields are

- 41 Aeronautical: aerodynamics.
- 42 Astronautical: aemspace; space technology.
- 43 Chemical: petroleum; petroleum refining; process.
- 44 Civil: architectural; hydraulic; hydrologic; marine; sanitary and environmental; structural; transportation.
- 45 Electrical: communication; electronic; power.
- 46 Mechanical: engineering mechanics.
- 47 Metallurgy and materials: ceramic; mining; textile; welding.
- 49 Engineering, n.e.c.*: agricultural; bioengineering; biomedical; industrial and management; nuclear; ocean engineering; systems.

Life sciences consist of five detailed fields: biological (excluding environmental), environmental biology, agricultural, medical, and life sciences not elsewhere classified. The illustrative disciplines provided below under each of these detailed fields are intended to be guidelines, not sharp definitions, as to what should be reported under a particular field; they represent examples of disciplines generally classified under each detailed field. A discipline, however, may be classified under another detailed field when the major emphasis is elsewhere. Research in biochemistry could be reported as biological, agricultural, or medical, depending on the orientation of the project; human biochemistry should be classified under biological, but animal biochemistry or plant biochemistry should be under agricultural.



- 51 Biological sciences (excluding environmental biology): anatomy; biochemistry; biology; biometry and biostatistics; biophysics; botany; cell biology; entomology and parasitology; genetics; microbiology; neuroscience (biological); nutrition; physiology; zoology; other biological, n.e.c.*
- 54 Environmental biology: ecosystem sciences; evolutionary biology; limnology; physiological ecology; population biology; population and biotic community ecology; systematics; other environmental biology, n.e.c.*
- 55 Agricultural sciences: agronomy; animal sciences; food science and technology; fish and wildlife; forestry; horticulture; plant sciences; soils and soil science; phytopathology; phytoproduction; agriculture, general; other agriculture, n.e.c.*
- 56 Medical sciences: internal medicine, neurology, obstetrics and gynecology; ophthalmology, otolaryngology; pediatrics; preventive medicine; pathology; pharmacology; psychiatry; radiology; surgery; dentistry; pharmacy; veterinary medicine; other medical, n.e.c.*
- 59 Life aciencea, n.e.c.*

Psychology deals with behavior, mental processes, and individual and group characteristics and abilities. Psychology is divided into three categories: biological aspects, social aspects, and psychological sciences, not elsewhere classified. Examples of the disciplines under each of these fields are

- 61 Biological aspects: experimental psychology; animal behavior; clinical psychology; comparative psychology; ethology.
- 62 Social aspects: social psychology; educational, personnel, vocational psychology and testing; industrial and engineering psychology; development and personality.
- 69 Psychological sciences, n.e.c.*

Social sciences are directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group. Social sciences include anthropology, economics, history, linguistics, political science, sociology, and social sciences not elsewhere classified. Examples of disciplines under the fields of social science are

- 71 Anthropology: archaeology; cultural and personality; social and ethnology; applied anthropology.
- 72 Economics: econometrics and economic atatistics; history of economic thought; international economics; industrial, labor and agricultural economics; macroeconomics; microeconomics; public finance and fiscal policy; theory; economic systems and development.
- 73 History: history and philosophy of science.
- 74 Linguistics: anthropological-archeological; computational; psycholinguistics; sociolinguistics.
- 75 Political science: area or regional studies; comparative government; history of political ideas; international relations and law; national political and legal systems; political theory; public administration.
- 76 Sociology: comparative and historical; complex organizations; culture and social atructure; demography; group interactions; social problems and social welfare; sociological theory.
- 79 Social aciences, n.e.c.*: research in law and education not elsewhere classified; socioeconomic geography.
- 99 Other sciences, n.e.c.*: to be used for multidisciplinary and interdisciplinary projects that cannot be classified within one of the above broad fields of science.



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