GAO

Briefing Report to the Chairman,
Subcommittee on Defense, Committee on
Appropriations, House of
Representatives

October 1986

INFORMATION SYSTEM

Status of the
Continental Army
Management
Information System

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National Security and
International Affairs Division

B-224909

October 24, 1986

The Honorable Bill Chappell, Jr.
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

As requested in your June 4, 1986, letter, we provided
information on requirements, acquisition, deployment, and
funding on the Continental Army Management Information
System (CAMIS), the Developmental Army Readiness and
Mobilization System (DARMS), and their replacement, called
the Reserve Component Automation (RCA), in a briefing to
your Office on August 25, 1986. Subsequent to the
briefing, we were asked to provide a status report on the
management and funding issues facing RCA. This briefing
report summarizes the background of CAMIS and DARMS and the
management and funding issues facing the RCA program.

PROGRAM BACKGROUND

The CAMIS program initiated in 1979 was intended to
automate the mobilization management functions of the Army
reserve component. A CAMIS prototype--DARMS--was developed
in 1982 to provide limited basic automation capabilities to
support mobilization and to validate CAMIS requirements.
From 1979 through 1985, about $50 million was expended to
develop CAMIS and DARMS.

In November 1985, the Army suspended the acquisition of
CAMIS and directed that the program be restructured. In
December 1985, DARMS' status was changed from developmental
to operational so that its limited automation capabilities
could be used until a new system was developed.

In August 1986, the Army revalidated CAMIS' peacetime
mobilization requirements but changed the system
acquisition to a three part approach, including provisions
to automate wartime mobilization execution functions, and
continued support for wartime command and control after
mobilization. This restructured approach was named RCA and
has the following major components:

-- Mobilization Command and Control (MOB C2), which is an
    application software development to automate the

reserve component mobilization planning and execution management functions. It will be developed as a new Standard Army Multi-Command Management Information System (STAMMIS).

-- STAMMIS Extension incorporates reserve component functional specifications into the software for STAMMIS' dealing with personnel, finance, logistics, and other management support functions.

-- Unit Administration, which will use commercially available microcomputers and software to automate the reserve component administrative functions at Reserve Centers and National Guard Armories.

The computer and telecommunications equipment requirements of the RCA will be determined and provided by the Standard Army Network (STARNET) Management Activity of the U.S. Army Information Systems Engineering Command.

MANAGEMENT AND FUNDING ISSUES

The RCA program faces some management and funding issues which need to be resolved as the program proceeds.

The MOB C2 STAMMIS requires the review and approval of its need, concept, funding, definition, and design by both the Army's and the Department of Defense's (DOD's) Major Automated Information System Review Council (MAISRC). The Army's MOB C2 MAISRC is currently scheduled for October 24, 1986. No specific date has been scheduled for the DOD MAISRC. DOD officials told us that the DOD MAISRC would include not only MOB C2, but the total RCA program and its associated requirements.

Another management issue is implementing the MOB C2, STAMMIS Extension, and STARNET interfaces. They will require extensive coordination among the staff at Headquarters, Department of the Army, the affected Army Commands, and the various program offices of the Information Systems Engineering Command. We were told that the Army Chief of Staff will establish a high priority for this effort.

Army officials said that they consider RCA funding the most critical short-term issue that must be resolved. The key funding issues are briefly summarized below.

The estimated funding requirement for MOB C2 STAMMIS for fiscal year 1987 is $1.5 million for the program office to develop the statement of work and the request for proposal to develop MOB C2 software. Under this funding schedule, software development will not start until fiscal year 1988. Also, Army officials said that, if MOB C2 is not approved by the DOD MAISRC or if this MAISRC review slips beyond early December 1986, funding for fiscal year 1988 may not be available because the requirement would not be included in the President's Budget for fiscal year 1988.

The STAMMIS Extension is currently unfunded for fiscal year 1987. The Army is in the process of determining what STAMMIS modifications are required and developing costs and time schedules for making the changes. Preliminary estimates indicate that the funding requirement for STAMMIS Extension is about $6 million for fiscal year 1987.

Unit Administration is not budgeted. The estimated funding requirement in fiscal year 1987 for Unit Administration is $27 million.

The STARNET, which RCA depends on for data processing and telecommunications hardware support was to be budgeted for about $16.9 million in fiscal year 1987, but the RCA funding requirement is estimated at $21.5 million, leaving about $4.6 million not budgeted for fiscal year 1987.

When annual schedules and total costs for RCA requirements are known, unbudgeted fiscal year 1987 requirements would have to be met by reprogramming funds from other Army programs if the RCA is to make any progress in fiscal year 1987. Funding shortfalls and schedule changes in any RCA component or STARNET will affect other RCA components because of the complex interrelationships and interdependencies among them.

Additional details on the results of our work is included in the appendixes. Our review included interviewing responsible Army officials and examining program and budgetary documents in the offices of the Assistant Chief of Staff for Information Management and the Deputy Chief of Staff for Operations and Plans, Department of the Army; the CAMIS and DARMS Program Office, Information Systems Engineering Command; and the Office of the Chief of Staff, U.S. Army Forces Command.

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We discussed the contents of this briefing report with
agency officials and we have included their comments where
appropriate. As requested, we did not obtain official
agency comments on this report.

Unless you publicly announce its contents earlier we plan
no further distribution of this report until 30 days from
the date of this briefing report. At that time we will
send copies to interested parties and make copies available
to others upon request. If you have any questions, please
call me on 275-4841.

Sincerely yours,

Richard Davis
Associate Director

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ABBREVIATIONS

ACSIM	Assistant Chief of Staff for Information Management
CAMIS	Continental Army Management Information System
DARMS	Developmental Army Readiness and Mobilization System
DOD	Department of Defense
FORSCOM	U.S. Army Forces Command
ISC	Information Systems Command
MAISRC	Major Automated Information System Review Council
MOB C2	Mobilization Command and Control
MPA	Military Personnel, Army
NGB	National Guard Bureau
NGPA	National Guard Personnel, Army
OCAR	Office of the Chief of Army Reserves

OMA	Operations and Maintenance, Army
OMANG	Operations and Maintenance, Army National Guard
OMAR	Operations and Maintenance, Army Reserve
OPA	Other Procurement, Army
RCA	Reserve Component Automation
RPA	Reserve Procurement, Army
STAMMIS	Standard Army Multi-Command Management Information System
STARNET	Standard Army Network

CAMIS BACKGROUND

In June 1979, U.S. Army Forces Command initiated the CAMIS program and established a program office at Fort McPherson, Georgia. In October 1979, the CAMIS Mission Element Needs Statement was approved, identifying the need to automate the planning and execution functions of mobilizing the Army reserve components. The command structure involved in reserve component mobilization included Headquarters, Army Forces Command, the Continental United States Army Commands, Readiness Groups, Mobilization Stations, and Army Reserve and National Guard units. The estimated cost of the original system was uncertain, ranging from $5 million to $100 million. In 1982, the Army estimated that CAMIS would have a life-cycle cost in excess of $600 million.

In June 1982, the Assistant Secretary of the Army for Financial Management approved advanced fielding of a partially developed system, called the Demonstration CAMIS Validation System. This system was to provide limited, basic automation support for a mobilization exercise and also be used as a test bed to continue CAMIS development. This Demonstration System was installed at Headquarters, Army Forces Command, 3 Continental United States Army headquarters, and 47 mobilization stations. Use of the system in the Mobilization Exercise 83 proved the need to automate the reserve component mobilization functions.

In November 1983, the Assistant Secretary of the Army for Financial Management approved the revised CAMIS acquisition plan. In June 1984, the Demonstration System was renamed the Developmental Army Readiness and Mobilization System (DARMS). One month later a request for proposal was released to industry for CAMIS development.

By January 1985, the Army had received proposals from Boeing Corporation, Sperry Corporation, and Systems Development Corporation. During bid evaluation in June 1985, the mobilization mission of the Continental United States Army was expanded to include mobilization training and the Secretary of the Army approved an expanded CAMIS program. Two months later the responsibility for CAMIS development was transferred from the Army Forces Command to the Army's Information Systems Command.

In November 1985, the CAMIS acquisition program was suspended, when the Under Secretary of the Army canceled the CAMIS request for proposal and directed the Army to:

-- create a secure and a non-secure data processing utility
   service under a 3 tier architecture (major command level
   through an intermediate command level to unit level);

-- use the World Wide Military Command and Control System and
   the Defense Data Network, following DOD telecommunications
   standards;

-- standardize and acquire competitively tier 3 (unit level)
   microcomputer hardware and, if feasible, tier 2 mini-
   computer (installation and command level) hardware;

-- acquire application software competitively from competent
   software contractors; and

-- use competitively an integration contractor to integrate
   and validate application software systems with the utility
   network services.

In November 1985, the budget request for CAMIS by
appropriation account for fiscal years 1987 through 1991 was as
shown in table I.1.

Table I.1: CAMIS Funding Profile

Appro-priation	FY87	FY88	FY89	FY90	FY91	Total
			(in millions)			
MPA[a]	$ 0.2	$ 0.2	$ 0.9	$ 1.6	$ 1.6	$ 4.5
RPA[b]	3.4	3.5	5.4	7.2	7.2	26.7
NGPA[c]	0.6	2.1	4.5	6.0	6.0	19.2
OMA[d]	1.6	1.1	1.1	0.8	0.4	5.0
OMAR[e]	27.4	18.3	23.2	18.2	12.6	99.7
OMNG[f]	1.7	7.7	10.1	12.1	10.2	41.8
Total	$34.9	$32.9	$45.2	$45.9	$38.0	$196.9
OPA[g]	6.5	17.2	38.7	37.2	8.2	107.8
Total	$41.4	$50.1	$83.9	$83.1	$46.2	$304.7

a Military Personnel, Army.
b Reserve Personnel, Army.
c National Guard Personnel, Army.
d Operations and Maintenance, Army
e Operations and Maintenance, Army Reserve.
f Operations and Maintenance, National Guard.
g Other Procurement, Army.

RCA BACKGROUND

In August 1986, the Army announced that the restructured CAMIS program would be called RCA. RCA retains the CAMIS Mission Element Needs Statement requirements, but the acquisition approach, management structure, and funding profile are significantly different. CAMIS, a stand alone system acquisition program under one program manager, was to be totally provided by a single competitively selected contractor. RCA involves three major programs and it will not be totally provided by a single contractor. RCA will include provisions to support peacetime automation, mobilization, and support of command and control after mobilization. Also, the acquisition of related computer and telecommunications equipment essential to the RCA is in a separate but related program. These major components are described below.

An application software development program, called MOB C2, is intended to develop a STAMMIS software package to automate both the management planning and execution functions needed to mobilize the reserve components. The Army's Information Systems Command has responsibility for this development program. An updated CAMIS Mission Element Needs Statement and a new MOB C2 Program Management Charter are being reviewed by Army Staff. The program management office for this program is budgeted for only fiscal year 1987 while the software development requirement is not budgeted.

The modification of existing STAMMIS software, called "STAMMIS Extensions," is being done to incorporate reserve component specifications and to improve the current software with a state-of-the-art programming to permit data base sharing by authorized reserve component users. The Army's Information Systems Command, Office of the Chief of Staff of the Army, and using Army Commands share responsibilities for completing this portion of the RCA. The Army's Vice Chief of Staff is expected to notify all Army Deputy Chiefs of Staff and appropriate Commands that the Army Chief of Staff places high priority on this effort and that the Assistant Chief of Staff for Information Management is designated as the Department of the Army coordinator and the focal point for the STAMMIS Extensions. This program is unfunded.

A microcomputer acquisition project, called "Unit Administration" is intended to obtain modern commercial micro-computers and off-the-shelf software to provide capabilities for the reserve components to automate a variety of unit administrative functions performed at Reserve Centers and National Guard Armories. The Office of the Chief of Staff for Army Reserves and the National Guard Bureau have the responsibility to fund and manage the Unit Administration project. This program is unfunded.

The separate but related hardware and telecommunications program essential to RCA is the STARNET. The Army Information Systems Command has established the STARNET Management Activity and charged it with the responsibility to develop and manage the network, including the determination and acquisition of the hardware and telecommunications needed to accommodate the MOB C2 and STAMMIS Extensions programs on STARNET. In fiscal year 1987 the Army's budget request included $16.9 million for STARNET, but the RCA requirement is estimated at $21.5 million, leaving $4.6 million not budgeted for fiscal year 1987.

RCA cost estimates for fiscal years 1987 through 1992 are provided in appendix IV.

RCA MANAGEMENT STRUCTURE

Responsibilities for RCA are dispersed among a variety of groups as illustrated in table III.1.

Table III.1: RCA Program Responsibilities

Requirement	MOB C2	STAMMIS Extension	Unit Admin	STARNET[a]
Functional specifications	Army Staff[b]	Army Staff	FORSCOM[c] NGB[e] OCAR[f]	ISC[d]
Materiel development	ISC	ISC	FORSCOM NGB	ISC
Program funding	ISC	Army Staff	OCAR NGB	ISC
System operation	ISC	ISC	USAR[g] ARNG[h]	ISC

a   Not in the RCA program but RCA depends on STARNET for data processing and telecommunications services.
b   Various staff elements of Headquarters, Department of the Army and Major Army Commands.
c   U.S. Army Forces Command.
d   Information Systems Command.
e   National Guard Bureau.
f   Office of the Chief of Army Reserves, Department of the Army.
g   U.S. Army Reserve units.
h   Army National Guard units.

RCA ESTIMATED COSTS

Table IV.1 shows estimated RCA costs for fiscal years 1987 through 1992 by program, as of October 7, 1986.

Table IV.1: Estimated RCA Costs by Program

	FY87	FY88	FY89	FY90	FY91	FY92	Total
			(in millions)				
STAMMIS Extension	$ 6.0	$15.0	$ 16.6	$16.0	$14.2	$14.2	$ 82.0
MOB C2	1.5	11.0	8.8	4.5	2.6	1.6	30.0
DARMS[a] Operation	4.7	4.7	4.7	0	0	0	14.1
Unit Admin	27.0	50.3	65.4	59.7	54.4	34.9	291.7
STARNET	21.5	17.1	18.1	8.0	3.3	3.3	71.3
Total	$60.7	$98.1	$113.6	$88.2	$74.5	$54.0	$489.1

a   DARMS costs were not included the estimated RCA costs provided by the Army.

United States
General Accounting Office
Washington, D.C. 20548

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Address Correction Requested