

AICPA's EDP General Internal Controls

<u>Control No.</u>	<u>Type</u>	<u>Description</u>
1	Organization and Operation	Segregation of functions between the EDP department and users.
2		Provision for general authorization over the execution of transactions.
3		Segregation of functions within the EDP department.
4	Systems Development and Documentation	The procedures for systems design, including the acquisition of software packages, should require active participation by representatives of the users and, as appropriate, the accounting department and internal auditors.
5		Each system should have written specifications which are reviewed and approved by an appropriate level of management and applicable user departments.
6		System testing should be a joint effort of users and EDP personnel and should include both the manual and computerized phases of the system.
7		Final approval should be obtained prior to placing a new system into operation.
8		All master file and transaction file conversions should be controlled to prevent unauthorized changes and to insure accurate and complete results.
9		After a new system has been placed in operation, all program changes should be approved before implementation to determine whether they have been authorized, tested and documented.
10		Management should require various levels of documentation and establish formal procedures to define the system at appropriate levels of detail.

11	Hardware and Systems Software	The control features inherent in the computer hardware, operating system, and other supporting software should be utilized to the maximum possible extent to provide control over operations and to detect and report hardware malfunctions.
12		Systems software should be subjected to the same control procedures as those applied to installation of and changes to application programs.
13	Access	Access to program documentation should be limited to those persons who require it in the performance of their duties.
14		Access to data files and programs should be limited to those individuals authorized to process or maintain particular systems.
15		Access to computer hardware should be limited to authorized individuals.
16	Data and Procedural	A control function should be responsible for receiving all data to be processed, insuring that all data are recorded, following up on errors detected during processing to see that they are corrected and resubmitted by the proper party, and verifying the proper distribution of output.
17		A written manual of systems and procedures should be prepared for all computer operations and should provide for management's general or specific authorization to process transactions.
18		Internal auditors or some other independent group within an organization should review and evaluate proposed system at critical stages of development.
19		On a continuing basis, internal auditors or some other independent group within an organization should review and test computer processing activities.

AICPA's EDP Application Internal Controls

<u>Control No.</u>	<u>Type</u>	<u>Description</u>
1	Input	Only properly authorized and approved input, prepared in accordance with management's general or specific authorization, should be accepted for processing by EDP.
2		The system should verify all codes used to record data.
3		Conversion of data into machine sensible form should be controlled.
4		Movement of data between one processing step and another, or between departments should be controlled.
5		The correction and resubmission of all errors detected by the application system should be reviewed and controlled.
6	Processing	Control totals should be produced and reconciled with input control totals.
7		Controls should prevent processing the wrong file, detect errors in file manipulation, and flag operator caused errors.
8		Limit and reasonableness checks should be incorporated within programs.
9		Run-to-run controls should be verified at appropriate points in the processing cycle.
10	Output	Output control totals should be reconciled with input and processing controls.
11		Output should be scanned and tested by comparison to original source documents.
12		Systems output should be distributed only to authorized users.

Source: *The Auditor's Study and Evaluation of Internal Control in EDP Systems*, prepared by the Computer Services Executive Committee, American Institute of Certified Public Accountants, 1977.