



## Remote Access Call Forwarding Feature Document 1A ESS™ Switch

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## 1. Introduction

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### Definition

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1.01 The Remote Access Call Forwarding (RACF) feature provides the capability for a Plain Old Telephone Service (POTS) customer to activate and deactivate the POTS Call Forwarding Variable (CFV) and Call Forwarding Usage Sensitive (CFUP) features for the customer's home telephone from another telephone.

### Reason For Reissue

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1.02 This document is being reissued to add information concerning the Termination Attempt Trigger (TAT) and Advanced Intelligent Network (AIN) Release 0.1 Protocol and Capabilities Features.

1.03 AT&T welcomes your comments on this practice. Your comments aid us in improving the quality and usefulness of AT&T documentation. Please use the Feedback Form provided in this practice or call the AT&T Documentation Preparation Group at 708-224-7053.

1.04 Additional copies of this practice, associated appendixes, and all referenced practices may be ordered from the AT&T Customer Information Center. One of the following methods should be used:

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1.05 Every effort has been made to ensure that the information in this practice is complete and accurate at the time of printing. However, information is subject to change.

1.06 This practice is issued by:

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### Background

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1.07 The RACF feature is not an independent feature. It requires the Remote Access Service (RAS) feature, which provides the basic remote access capability for customers to access selected features from either their home telephone or a remote telephone. A remote telephone is a telephone other than a customer's home telephone. The RAS feature is assigned for a customer's home telephone on a per-line basis. For detailed information about the RAS feature, refer to Part 6 A(9).

1.08 The features to be accessed using RACF must be assigned or available for a customer's home telephone. The CFV feature

is assigned for a customer's home telephone on a per-line basis. For detailed information about the CFV feature, refer to Part 6 A(1). No customer assignment is required for the CFUP feature. The CFUP feature is provided on a per-switch basis as an office option. For detailed information about the CFUP feature, refer to Part 6 A(4).

1.09 The RACF-CTX custom feature is a separate feature but is dependent upon the RAS and RACF features. To access the RACF-CTX feature, the RAS subscribing customer must also be a Centrex CFV subscriber. The RACF-CTX feature is modeled after the activation/deactivation process of the existing POTS RACF feature.

### **Economic Worth**

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1.10 The RACF feature can increase the use and convenience of the CFV and CFUP features for customers and can generate additional revenue for telephone companies.

1.11 Without the RACF feature, the CFV and CFUP features can be activated and deactivated only from a customer's home telephone. This limits the customer use and convenience of these features. A customer may not always be able to anticipate the need to forward calls. The need to forward calls often occurs when a customer is not at home. In such cases, CFV and CFUP cannot be used. This is inconvenient for the customer and represents lost revenue for the telephone company.

### **Availability**

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1.12 The RACF feature is initially available in the 1AE10.05 generic program periodic partial update (PPU). The RACF-CTX feature is initially available in the 1AE10.08, 1AE11.02, and later generic program PPU.

### **Feature Groups**

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1.13 The RACF feature is an optionally loaded feature group 9SRACF that consists of feature package 9FRACF. Feature group 9SRACF requires feature group 9SRAS.

1.14 The RACF-CTX custom feature is defined by set card FF064 and requires the RAS and RACF feature groups to be loaded in the office (set cards 9SRAS and 9SRACF).

### **Feature Assignment**

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1.15 The RACF and RACF-CTX features are provided on a per-switch basis.



#### **NOTE:**

The RACF feature, per se, is not assigned for customers. For customers to use the RACF feature, the RAS feature and either the CFV or CFUP feature are required as discussed previously. The RAS and CFV features are assigned for customers on a per-line basis. The CFUP feature is provided on a per-switch basis as an office option.

## **2. User Perspective**

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### **User Profile**

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2.01 The RACF feature is designed for POTS customers who desire remote access to CFV and/or CFUP. The RACF-CTX custom feature is designed for Centrex customers who desire remote access to CFV.

### **Customer Premises Equipment**

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2.02 No special or unique customer premises equipment is required for the RACF feature. A RAS customer uses a remote telephone for RACF access to either CFV or CFUP. The remote telephone must use dual tone multifrequency (DTMF) signaling to complete a RAS call. A telephone that uses dial pulse (DP) signaling can be used if it is equipped with an adjunct device that provides DTMF signaling.

2.03 Telephone sets that are not equipped with the "\*" and "#" pushbuttons can be used for RACF; however, two customer dialing capabilities for RACF cannot be used. With RACF, these pushbuttons indicate customer

requests to the 1A ESS Switch as follows:

- (a) The "\*" indicates a customer request to redial a number that was misdialled. Without the "\*" pushbutton, the customer waits for a voice message prompt to either confirm or deny the number that was dialed.
- (b) The "#" indicates the end of customer dialing. Without the "#" pushbutton, the customer waits for 4-second time-out after the last digit was dialed.



**NOTE:**

See paragraph 3.10 for detailed information about the treatment of "\*" and "#" for Centrex customers.

## Feature Description

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### A. General

**2.04** The RACF feature operates in conjunction with the RAS feature to provide remote access capabilities to activate and deactivate CFV and CFUP. The RAS feature provides the basic capability for remote access to selected features. A brief description of the RAS feature is included in this part for continuity and clarity.



**NOTE:**

For detailed information about the RAS feature, refer to Part 6 A(9).

**2.05** The RACF-CTX feature description, feature operation, and interactions parallel those in the following sections for RACF except where differences are noted.

**2.06** The CFV and CFUP features are not changed by the RACF feature. The existing CFV/CFUP activation/deactivation process and call forwarding functions are not changed. The access codes for CFV/CFUP activation (for example, \*72) and deactivation (for example, \*73) are used for the RACF feature.



**NOTE 1:**

The existing CFV activation/deactivation codes defined for their

Centrex group are used for the RACF-CTX feature.



**NOTE 2:**

For detailed information about the CFV and CFUP features, refer to Part 6 A(1) and A(4).

**2.07** The RACF-CTX feature interacts with call forwarding outside (CFO) to allow a Centrex customer with CFV to forward the calls outside the Centrex group.

**2.08** The RACF and RACF-CTX features interact with the SCF feature in the following manner:

- (a) If the office does not have total separation of SCF (TSSCF) and SCF is active for the home directory number (DN), the customer cannot activate CFV for that home DN until call forwarding is deactivated.
- (b) If the office does not have TSSCF, and SCF is not active for the home DN, the customer is able to activate CFV for the home DN.
- (c) If the office has TSSCF, whether or not SCF is active for the home DN, the customer is able to activate CFV for that home DN.

### B. Remote Access Service

**2.09** A customer uses the RAS feature to originate a remote access call. To originate a remote access call, the customer dials a special access number (SAN) from a remote telephone. A call to a SAN is connected to an announcement service circuit (ASC), which provides voice messages and collects digits.

**2.10** Voice messages provide prompts and dialing instructions for a customer to dial other required information. The information required for RAS includes the customer's home DN, 4-digit personal identification number (PIN), and a 1- to 6-digit feature access code for the feature that is to be remotely accessed.

**2.11** The digits for the home DN, PIN, and feature access code are collected by the ASC. Each set of digits collected is screened and validated during call processing to determine whether or not the call is an

authorized RAS call. An unauthorized RAS call is not provided remote access to any feature. Part of the authorization process includes verifying that the feature access code is for a feature that is assigned or available for the customer's home DN. For RACF, either CFV must be assigned or CFUP must be available for the customer's home DN. Otherwise, a customer is not provided remote access to these features.

**2.12** After an authorized RAS call for CFV/CFUP is successfully established, the RAS feature passes call control to the RACF feature. Call control is passed to RACF using a loop mode. The loop mode causes call control to be returned to the RAS feature after customer interactions with the RACF feature are completed.

**C. Remote Access Call Forwarding**

**2.13** When call control is passed to the RACF feature, the call remains connected to the ASC. The ASC provides voice message prompts and collects digits required for RACF. Table A lists examples of typical voice messages provided by the ASC for the RACF feature.

**2.14** When call control is passed to the RACF feature, the feature access code for either CFV/CFUP activation or deactivation has already been collected and validated. The customer interactions with the RACF feature depend on whether the activation or deactivation access code was dialed. Generally, the customer interactions for successful activation and deactivation requests are as follows:

- (a) If the activation access code was dialed, a voice message prompts the customer to dial the DN to which calls are to be forwarded. After the DN is dialed, a voice message repeats the DN dialed and requests the customer to either confirm that the DN dialed is correct or dial another DN. After the DN is confirmed, a voice message informs the customer that calls will now be forwarded and instructs the customer to either hang up or dial another feature access code.



**NOTE 1:**  
Possible dialing patterns for

Centrex customers are a Centrex extension (except for City-wide Centrex) or a 1/2-digit Centrex speed call access code.



**NOTE 2:**  
POTS and Centrex CFV-CFO customers' (with Assume Dial 9 or Dial 9 access) possible dialing patterns for the "forward-to" DN can include a carrier indicator (for example, digits 10XXX/(101XXX beginning with 1AE12 generic)), a distance dialing indicator (for example, digit 1), and either a 7- or 10-digit number or a 1- or 2-digit speed call code. Centrex customers with CFO may also use the **YXX (Dial 9 Access) + 10XXX/(101XXX beginning with 1AE12 generic) + 1 + 10-digit DN** dialing pattern.

- (b) If the deactivation access code was dialed, a voice message informs the customer that calls will no longer be forwarded and instructs the customer to either hang up or dial another feature access code.

**2.15** After a successful CFV/CFUP activation or deactivation, the RACF feature returns call control to the RAS feature. If the customer hangs up, the call is disconnected. If the customer dials another feature access code to select another feature, the digits are collected by the ASC and the access code is validated for the customer's home DN as stated previously.

**Feature Operations**

**2.16** This part describes the RACF feature operations in general terms after call control is passed from the RAS feature to the RACF feature. The feature operations are described based on the access code dialed during a RAS call for either CFV/CFUP activation or deactivation. References to voice

messages are keyed to the voice messages listed in Table A. For example, a reference to the first message listed in Table A is indicated by A-1.

#### A. Customer Dialing

2.17 During the dialing sequence for CFV/CFUP activation, the customer is prompted by voice message A-1 to dial the DN to which calls are to be forwarded (that is, forward-to DN) and by voice message A-2 to dial a confirmation digit.

2.18 The customer has three chances to correctly dial a forward-to DN and another three chances to confirm the forward-to DN. Opportunities are provided for the customer to correct dialing errors. Three conditions that are considered dialing errors are as follows:

- (a) After each dialing prompt, 7-second timing is started. If the customer does not start dialing and time-out occurs, the same voice message prompt is repeated. This dialing error is allowed three times maximum.
- (b) After the customer starts dialing, 4-second timing is done. If time-out occurs and the customer has not dialed a valid number of digits, voice message A-5 is provided. This dialing error is allowed three times maximum.



#### NOTE:

The wait for 4-second time-out after dialing a complete set of digits can be cancelled by dialing the request-to-redial indicator (that is, "#").

- (c) Prior to dialing a complete set of digits, if the customer realizes a digit has been misdialled, the customer can request to redial the desired number (that is, start again) by dialing the request-to-redial indicator (that is, "\*\*"). In this case, the request-to-redial indicator will cause digit collection to be terminated and the same voice message prompt to be repeated. This dialing error is allowed three times maximum.



#### NOTE:

After three successive dialing errors, voice message A-6 is provided and the call is disconnected.

2.19 A customer can start dialing after the beginning of a voice message prompt without waiting for the entire message to complete. In this case, the voice message is terminated immediately and 4-second timing is started.

#### B. System Resources

2.20 If system resources are temporarily unavailable during an attempt to activate or deactivate CFV/CFUP call forwarding, the activation or deactivation cannot be completed. An attempt is made to inform the customer that a temporary problem exists and to try again later. For example, if a software register required for CFV/CFUP activation and deactivation is temporarily unavailable during a RACF call, voice message A-7 is provided and the call is disconnected.

#### C. Activation Access Code

2.21 After the activation access code is dialed and confirmed, call processing determines whether or not CFV/CFUP is already activated for the customer's home DN. If call forwarding is already activated, voice message A-4 informs the customer that call forwarding is currently in effect. The message also informs the customer that call forwarding currently in effect must be deactivated in order to activate call forwarding to another DN. In this case, call control is returned to the RAS feature. The customer can either dial the deactivation access code, another feature access code, or hang up.

2.22 If call forwarding is not already activated, voice message A-1 instructs the customer to dial the DN to which calls are to be forwarded. After the customer dials the forward-to DN, call processing validates the DN. For validation of an intraswitch forward-to DN, a check is made to determine if the DN is assigned in the customer's home switch. For an interswitch forward-to DN, limited checks are made for the area code and the office number. In either case, if the number dialed for the forward-to DN is not valid, voice message A-9 informs the customer that the number dialed is not valid and instructs the customer to

dial again. A customer is allowed three attempts to dial a valid DN. After three unsuccessful attempts to dial a valid DN, voice message A-6 is provided and the call is disconnected.



**NOTE:**

With the RACF or RACF-CTX features, the validation process does not include a courtesy call to the forward-to DN.

2.23 After the customer dials a valid DN, voice message A-2 repeats the DN and instructs the customer to dial either the digit "1" to confirm the DN is correct, or the digit "0" to deny the DN is correct. The customer is also instructed to dial another DN if the DN is not correct. If the customer dials the digit "1" to confirm that the DN is correct, call forwarding is activated. Voice message A-3 informs the customer that calls will now be forwarded. After activation, call control is returned to the RAS feature. The customer can either hang up or dial another feature access code.



**NOTE:**

Dialing errors previously described are applicable to dialing the confirmation digit. If no digit is dialed and time-out occurs, voice message A-2 is repeated. If the customer dials the digit "0" to deny that the DN is correct, voice message A-2 is repeated. After three unsuccessful attempts to confirm the forward-to DN, voice message A-6 is provided and the call is disconnected.

**D. Deactivation Access Code**

2.24 After the deactivation access code is dialed and confirmed, call processing determines whether or not CFV/CFUP is activated for the customer's home DN. If call forwarding is not activated, voice message A-8 informs the customer that calls are currently not being forwarded. In this case, call control is returned to the RAS feature. The customer can either dial the activation access code, another feature access code, or hang up.

2.25 If call forwarding is activated, it is deactivated and voice message A-10

informs the customer that calls will no longer be forwarded. Call control is returned to the RAS feature. The customer can either dial another feature access code or hang up.

**Interactions**

2.26 The RACF feature receives call control from and returns call control to the RAS feature as described in this practice.

2.27 The RACF feature does not change the capability to activate and deactivate CFV or CFUP from a customer's home telephone. With the RACF feature, activation and deactivation can be accomplished from either a remote telephone or the customer's home telephone. For example, if CFV is activated from a remote telephone using the RACF feature, it can be deactivated from the home telephone using the CFV feature.

2.28 The RACF feature provides a CFV capability for hunt DNs in a multiline hunt group (MLHG) that is not provided by the CFV feature. The RACF feature can be used to activate and deactivate CFV for any DN in a POTS MLHG that is assigned the CFV feature. If RACF is used to activate CFV for a hunt DN in a MLHG, RACF must also be used to deactivate CFV for that MLHG DN.



**NOTE:**

The CFV feature can be used to activate and deactivate CFV for only the main DN of a MLHG. For detailed information about MLHGs, refer to Part 6 A(2).

2.29 If a customer's home telephone is assigned the Speed Calling (SC) feature, the customer can use a SC code during CFV/CFUP activation to dial the DN to which calls are to be forwarded.



**NOTE:**

For detailed information about SC, refer to Part 6 A(5).

2.30 The RACF feature allows the capability to activate and deactivate CFV and CFUP to a remote telephone that is an ASP/SSP Dial Number Trigger (DNT).

The ASP/SSP feature for 1AE12.01 and later PPU's, provides the capability to CFV and CFUP non-Centrex (POTS) stations and Centrex base station to ASP/SSP DNTs. A call to the RACF customer's base telephone that is forwarded to an ASP/SSP DNT will trigger a query to the Service Control Point (SCP) database to determine how to route the call. This design allows the SCP database to vary the final route chosen to complete the call without changing the base telephone forwarding.

2.31 If a customer is activating RACF for a Centrex Base with Off-Hook Delayed trigger (OHD), and dials a Centrex Extension as the Call Forward-To-DN (CFDN), the Centrex Extension is stored as dialed. This is also true if the customer dials a Speed Call number which is translated to a Centrex Extension, as a CFDN (for PPU 12.03 and later generics).

2.32 If a customer is activating RACF for a Centrex Base, and dials a Centrex Extension Trigger as the Call Forward-To-DN (CFDN), the Centrex Extension is stored as dialed. This is also true if the customer dials a Speed Call number which is translated to a Centrex Extension Trigger, as a CFDN (for PPU 12.03 and later generics).



**NOTE:**  
For detailed information about the ASP/SSP feature, DNT, OHD, and Centrex Extension Trigger capabilities, refer to Part 6 A(10).

2.33 The AIN Release 0.1 Termination Attempt Trigger (TAT) cannot be assigned to the Special Access Number (SAN). However, Call Forwarding Variable (CFV) can be activated via RACF for subscribers who have the TAT feature assigned to their home DN. The TAT feature is not recognized during the remote activation process. TAT processing occurs when a call is made to the home DN. If the response from the Service Control Point (SCP) is an Authorize Termination message, the switch based call forwarding is executed. If the SCP responds with a Forward Call message, the routing information is contained in this message. Refer to AT&T Practice 231-390-522 for more information on the Advanced Intelligent Network (AIN) Release 0.1 Protocol and Capabilities which include the

TAT feature.

## Operational Limitations and Restrictions

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2.34 No operational limitations and restrictions are applicable to the RACF feature, per se. Limitations and restrictions that apply to the CFV, CFUP, and RAS features also apply to the RACF feature. For example, the remote telephone must be capable of DTMF signaling for both the RAS and RACF features.

2.35 Centrex customers using RACF-CTX cannot forward call forwarding over private facilities (CFPF) and electronic tandem switching (ETS) calls.



**NOTE:**  
For detailed information about the CFV, CFUP, and RAS features, refer to Part 6 A(1), A(4), and A(9).

## 3. Engineering

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3.01 These guidelines are for planning purposes only. The Central Office Equipment Engineering System (COEES) Information System engineering document, Index 71, should be used to manually order and engineer the 1A ESS Switch. The standard recommended automated procedure is Mechanized Ordering (COEES-MO).



**NOTE:**  
This part provides information applicable to the RACF feature only. For information applicable to the CFV, CFUP, and RAS features, refer to Part 6 A(1), A(4), and A(9).

## Hardware

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3.02 No new or unique hardware is required for the RACF feature. The RACF feature uses ASC and announcement trunk interface (ATI) circuits, which are required and engineered for the RAS feature.

## Firmware

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3.03 New ASC firmware is required to provide voice messages for the RACF feature. Table A lists examples of typical voice messages provided by the ASC for the RACF feature. Some of the message phrases can be changed to meet the particular requirements of the telephone company. For detailed information, see COEES Information System engineering document, Index 61.

## Software

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### A. Base Generic Program

3.04 Approximately 15 words are required in the base generic program regardless of whether or not the optional RACF feature is loaded.

### B. Optionally Loaded Feature Groups

3.05 Approximately 1120 (1AE10) or 1440 (1AE11) program store words are required for feature group 9SRACF.

### C. Parameters/Call Store Areas

3.06 The RACF feature requires one word in duplicated call store for a traffic measurement of the total number of RACF access attempts. This word is built when feature group 9SRACF is loaded using set card 9SRACF.



#### NOTE:

For detailed set card, parameter, and call store information, refer to Part 6 B(1), B(2), and B(3).

3.07 The RACF feature uses RAS registers (RASRs) and Automatic Message Accounting (AMA) registers, which are required for the RAS feature. The usage of these registers for RACF calls is considered when the RAS feature is engineered.

3.08 The RACF-CTX feature requires set card FF064 to be set to 1 for the feature to be activated.

3.09 Parameter and call store areas required for the CFV and CFUP features are engineered independently for those features.

## D. Translations

3.10 No translations for POTS lines are required for the RACF feature, per se. For Centrex customers, two 2-bit fields are defined in the Centrex common block to indicate if the "\*" and the "#" symbols are to be used as special characters. RACSC in word 26, bits 16 and 17, allows the Centrex customer four possible options for using special characters (\* and #) when entering a feature access code. Refer to Table B. LSCDI in word 23, bit 9 and 10, allows the Centrex customer four possible options when entering a forward-to DN. Refer to Table C.

## Real Time

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3.11 In a 1A ESS Switch with fast stores, a RACF activation call requires approximately 27,000 cycles and a RACF deactivation call requires approximately 23,000 cycles.

3.12 In a 1A ESS Switch without fast stores, a RACF activation call requires approximately 40,500 cycles and a RACF deactivation call requires approximately 34,500 cycles.



#### NOTE:

For detailed information to estimate the real time impact on call capacity for a 1A ESS Switch, see COEES Information System engineering document, Index 71.

## 4. Implementation

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4.01 The RACF feature requires a parameter update using set card 9SRACF to load feature group 9SRACF. Since the RACF feature requires the RAS feature, the RACF feature can be loaded either at the same time or after the RAS feature is loaded. The RACF-CTX custom feature requires a parameter update to set card FF064. Set card FF064 must be set to 1 to activate the feature. RACF-CTX requires the RAS and RACF features to be loaded.

4.02 No other procedures are required to implement the RACF feature, per se. Implementation of the RACF feature depends on the CFV, CFUP, and RAS features. For

information regarding implementation and assignment requirements for the CFV, CFUP, and RAS features, refer to Part 6 A(1), A(4), and A(9).

### Translation Forms

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4.03 The RACF-CTX feature requires translation form ESS 1109, Centrex Group Record. For detailed information regarding this form, refer to Part 6 B(4).

### Recent Change Messages

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4.04 The special dialing character indicators for RACF-CTX can be set using the RC:CTXCB recent change message. For detailed information about the RC:CTXCB recent change message, refer to Part 6 A(6).

### Verification

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4.05 The TR17 output message given in response to the VFY-CSTG-35 verify message is affected for the RACF-CTX feature. A field in the TR17 output message indicates if the "\*" and "#" symbols are used as special dialing indicators for Centrex lines.

## 5. Administration

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### Measurements

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5.01 One traffic measurement, traffic measurement code (TMC) 005, equipment group (EGO) 409, is available on the hourly (H and C), selected quarter hour (DA15), and special studies (S1 and S2) traffic schedules. This traffic measurement is a peg count of the total number of RACF access attempts.



**NOTE:**  
For detailed traffic measurement information, refer to Part 6 A(3).

### Automatic Message Accounting

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5.02 A V26 AMA record is generated for each successful CFUP activation and deactivation using the RACF feature. This is the same type AMA record that is generated for the existing CFUP feature.

5.03 Two other AMA records may be generated for an RACF call as follows:

- (a) If a call from a remote telephone to a SAN is billable, an AMA record is generated for the billing DN of the remote telephone.
- (b) If a customer has usage-sensitive billing for RAS, an AMA record is generated for the customer's home DN for each completed RAS call.



**NOTE:**  
For RAS feature AMA information, refer to Part 6 A(9). For detailed AMA information, refer to Part 6 A(7) and A(8).

## 6. Supplementary Information

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### References

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6.01 The following documentation contains information related to or affected by the RACF feature.

#### A. AT&T Practices

- (1) 231-090-074 – *Call Forwarding Variable*
- (2) 231-090-180 – *Multiline Groups Hunting and Nonhunting*
- (3) 231-090-207 – *Traffic Measurements*
- (4) 231-090-292 – *Call Forwarding Usage Sensitive*
- (5) 231-090-401 – *Speed Calling*
- (6) 231-318-355 – *Centrex/ESSX-1 Recent Change Formats*
- (7) 231-390-063 – *Automatic Message Accounting (Single Entries)*

- (8) 231-390-069 – *Automatic Message Accounting Standard Entries and Multientry Teleprocessing System*
- (9) 231-390-391 – *Remote Access Service*
- (10) 231-390-519 – *Advanced Services Platform/Service Switching Point (ASP/SSP) Feature Document*
- (11) 231-390-522 – *Advanced Intelligent Network (AIN) Release 0.1 Protocol and Capabilities Feature Document*

**B. Other Documentation**

- (1) *Parameter Guide PG-1A*
- (2) *Office Parameter Specification PA-6A001*
- (3) *Call Store Data Layout Manual PK-6A006*
- (4) *Translation Guide TG-1A*

## 7. Abbreviations and Acronyms

### A

**AIN**  
Advanced Intelligent Network

**AMA**  
Automatic Message Accounting

**ASC**  
Announcement Service Circuit

**ATI**  
Announcement Trunk Interface

### C

**CFO**  
Call Forwarding Outside

**CFPF**  
Call Forwarding Over Private Facilities

**CFUP**  
Call Forwarding Usage Sensitive

**CFV**  
Call Forwarding Variable

**COEES**  
Central Office Equipment Engineering System

**COEES-MO**  
Central Office Equipment Engineering System Mechanized Ordering

### D

**DN**  
Directory Number

**DNT**  
Dial Number Trigger

**DP**  
Dial Pulse

**DTMF**  
Dual Tone Multifrequency

### E

**EGO**  
Equipment Group

**ETS**  
Electronic Tandem Switching

### M

**MLHG**  
Multiline Hunt Group

### O

**OHD**  
Off-Hook Delay

### P

**PIN**  
Personal Identification Number

**POTS**  
Plain Old Telephone Service

**PPU**  
Periodic Partial Update

### R

**RACF**  
Remote Access Call Forwarding

**RAS**  
Remote Access Service

**RASR**  
RAS Registers

### S

**SAN**  
Special Access Number

**SC**  
Speed Calling

**SCP**  
Service Control Point

**T**

**TAT**  
Termination Attempt Trigger

**TMC**  
Traffic Measurement Code

**TSSCF**  
Total Separation of SCF

**Table A. Examples of Typical Voice Messages for Remote Access Call Forwarding**

<b>Announcement No.</b>	<b>Typical Message</b>
A-1	This is your call forwarding service. Please dial the number to which you want your calls forwarded. If you must dial "1" or an area code to reach this number from your home or office, then do so. Please dial now.
A-2	Your calls will be forwarded to (directory number). If the number is correct, dial "1". If this number is not correct, dial "0". Please dial now.
A-3	Your calls are now forwarded. You may hang up or dial another feature code now.
A-4	This is your call forwarding service. Your calls are currently forwarded. You may not forward your calls to a new number until you deactivate call forwarding first. You may hang up or dial the deactivation code now.
A-5	We're sorry, you have not dialed enough digits. Please start again.
A-6	We're sorry, we cannot activate your call forwarding service because too many errors have been made. Please hang up now and try again later.
A-7	Your selective call forwarding service is now on. You may not forward your calls to a new number until you deactivate call forwarding first. You may hang up or dial another feature code now.
A-8	This is your call forwarding service. We're sorry, your calls are not currently being forwarded. You may hang up or dial another feature code now.
A-9	We're sorry. The digits you dialed (number dialed) are not a valid telephone number. Please start again.
A-10	This is your call forwarding service. Your calls will no longer be forwarded. You may hang up or dial another feature code now.
A-11	Your calls will be forwarded to (DIAL9 digits).
A-12	(Second part of forward-to number). If the number is correct, dial "1". If this number is not correct, dial "0". Please dial now.

**Table B. Special Dialing Characters for Feature Access Codes**

<b>Bits 16 and 17</b>	<b>Special Characters</b>	<b>Definition</b>
00	* and #	Not treated as special characters during the feature access code entering sequence (Default). In this case, time-out occurs even when an * or # is entered.
01	* Only	Treated as a special character during the feature access code entering sequence. In this case, delayed time-out does not occur after the * is entered.
10	# Only	Treated as a special character during the feature access code entering sequence. In this case, delayed time-out does not occur after the # is entered.
11	* and #	Both treated as special characters during the feature access code entering sequence. In this case, delayed time-out does not occur after the * or # is entered.

**NOTE:** If the \* and # are used as feature access code editing characters, they cannot be part of the feature access code entering process (for example, \*72 for CFV).

Table C. Special Dialing Characters for Forward-To Directory Numbers

Bits 9 and 10	Special Characters	Definition
00	* and #	Not treated as special characters during the forward-to DN entering sequence (Default). In this case, time-out occurs even when an * or # is entered.
01	* Only	Treated as a special character during the forward-to DN entering sequence. In this case, delayed time-out does not occur after the * is entered.
10	# Only	Treated as a special character during the forward-to DN entering sequence. In this case, delayed time-out does not occur after the # is entered.
11	* and #	Both treated as special characters during the forward-to DN entering sequence. In this case, delayed time-out does not occur after the * or # is entered

**NOTE 1:** These options are shared with the LASS Total Separation of Selective Call Forwarding feature.

**NOTE 2:** If the \* and # are used as forward-to DN editing characters, they cannot be part of the forward-to DN entering process (for example, \*9 for outside dialing).

# FEEDBACK FORM

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