



# **RITS Bulk File Layout FERS FRAE**

# RITS Bulk File Layout FERS FRAE

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## RITS Bulk File Layout FERS FRAE

### Bulk File Format Conventions

The following conventions were used in the bulk file formats for this document.

- All required fields are indicated by a \*
- Values in the column “**Type**”
  - A – Alphanumeric N
  - Numeric
- Alphanumeric fields are left justified and padded with spaces.
- Numeric fields are right justified and padded with zeros.
- Numeric fields with an implied decimal are described in the “Length” column as two numbers separated by a decimal.
  - o The first number represents the total length of the field.
  - o The second number represents the implied decimal places within the field.
    - For example, a numeric field defined as 11.2 has a total of 11 bytes with 2 implied decimal places.
- Standard or valid default value(s) of fields are denoted by quotes (“xxxxxx”) around the value.

### Bulk File Processing Constraints

The recommended file size recommended for all IPAC bulk files is less than 30mb; however, there are other file processing factors that could contribute to “application exception” errors. This includes the number of transaction types in a single file, transaction errors, multiple bulk files submitted at the same time and other agency files processing at the same time. It is recommended file submissions be staggered and not submit a larger number of files at the same time.

## SF 2812 Data

**Purpose:** The data elements reflect a line-by-line listing of the data elements for the developmental Retirement and Insurance Transfer System (RITS). Each 2812 and 2812A are viewed as one transaction containing multiple record types: the SF2812 Data will require three records, the number of records necessary for the SF 2812A Data will be determined by the number of Health Benefit codes reported, and one record will be required for the 2812A Total Record Data.

**Data Flow:** Input from Federal Program Agencies to RITS  
Output from RITS to OPM

### RITS Bulk File Layout FERS FRAE

## Overstrike Codes

The last character of the field contained a letter instead of a digit, which is an Overstrike Code. This is used to code positive/credit, negative/debit values in the amount field.

\* The last digit of the amount field is “signed” with an over-punch to indicate a positive or negative dollar amount.

Example: "N" translates to a negative "5."

| Digit | Positive values | Negative values |
|-------|-----------------|-----------------|
| 0     | {               | }               |
| 1     | A               | J               |
| 2     | B               | K               |
| 3     | C               | L               |
| 4     | D               | M               |
| 5     | E               | N               |
| 6     | F               | O               |
| 7     | G               | P               |
| 8     | H               | Q               |
| 9     | I               | R               |

### RITS Bulk File Layout FERS FRAE

## File Identifier Record

APPLICATION: RITS

FILE: 2812 File

FLOW: Input from Federal Program Agencies to RITS RECORD:  
File Identifier Record

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### APPLICATION DATA

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| FIELD    | COLUMN | LENGTH | TYPE | VALUE/DESCRIPTION                                    |
|----------|--------|--------|------|--|
| File ID* | 1-7    | 7      | A    | “RITFRAE”- RITS Bulk File with FERS FRAE enhancement |

## RITS Bulk File Layout FERS FRAE

### SF 2812 Data (Record 1 of 3)

APPLICATION: RITS

FILE: 2812 File

FLOW: Input from Federal Program Agencies to RITS RECORD:

SF 2812 Data (Record 1 of 3)

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### APPLICATION DATA

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| FIELD                    | COLUMN  | LENGTH | TYPE | VALUE/DESCRIPTION                   |
|--------------------------|---------|--------|------|-------------------------------------|
| 2812 Data Record Type*   | 1-4     | 4      | N    | "2812"                              |
| Transaction Code*        | 5-6     | 2      | N    | "01"                                |
| Payroll Office Number*   | 7-14    | 8      | N    |                                     |
| Pay Period Code*         | 15-17   | 3      | A    | For example, W01                    |
| Original/Supplemental*   | 18      | 1      | A    | (I) Original 2812, (S) Supplemental |
| Date Paid*               | 19-24   | 6      | N    | YYMMDD                              |
| From Date*               | 25-30   | 6      | N    | YYMMDD                              |
| To Date*                 | 31-36   | 6      | N    | YYMMDD                              |
| Basic Withholdings       | 37-47   | 11.2   | N    | Life Insurance                      |
| Basic Contributions      | 48-58   | 11.2   | N    | Life Insurance                      |
| Standard Withholding     | 59-69   | 11.2   | N    | Life Insurance                      |
| Additional Withholding   | 70-80   | 11.2   | N    | Life Insurance                      |
| Family Withholding       | 81-91   | 11.2   | N    | Life Insurance                      |
| Post-Ret. Withholding    | 92-102  | 11.2   | N    | Life Insurance                      |
| Total Life Withholding   | 103-113 | 11.2   | N    | Life Insurance                      |
| Total Life Contributions | 114-124 | 11.2   | N    | Life Insurance                      |

|                      |         |      |   |                |
|----------------------|---------|------|---|----------------|
| Total Life Insurance | 125-135 | 11.2 | N | Life Insurance |
|----------------------|---------|------|---|----------------|

## RITS Bulk File Layout FERS FRAE

### SF 2812 Data (Record 2 of 3)

APPLICATION: RITS

FILE: 2812 File

FLOW: Input from Federal Program Agencies to RITS RECORD:

SF 2812 Data (Record 2 of 3)

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### APPLICATION DATA

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| FIELD                      | COLUMN | LENGTH | TYPE | VALUE/DESCRIPTION |
|----------------------------|--------|--------|------|-------------------|
| 2812 Data Record Type*     | 1-4    | 4      | N    | "2812"            |
| Transaction Code*          | 5-6    | 2      | N    | "02"              |
| Regular Withholding        | 7-17   | 11.2   | N    | Health Benefits   |
| Regular Contribution       | 18-28  | 11.2   | N    | Health Benefits   |
| TCC Withholding            | 29-39  | 11.2   | N    | Health Benefits   |
| TCC Contributions          | 40-50  | 11.2   | N    | Health Benefits   |
| Total HB Withholding       | 51-61  | 11.2   | N    | Health Benefits   |
| Total HB Contributions     | 62-72  | 11.2   | N    | Health Benefits   |
| Total Health Benefits      | 73-83  | 11.2   | N    | Health Benefits   |
| All Category Withholding   | 84-94  | 11.2   | N    | Retirement - CSRS |
| All Category Contributions | 95-105 | 11.2   | N    | Retirement - CSRS |

|                             |         |      |   |                   |
|-----------------------------|---------|------|---|-------------------|
| Salary Offset Contributions | 106-116 | 11.2 | N | Retirement - CSRS |
| Mil/Civ Dep. Withholding    | 117-127 | 11.2 | N | Retirement - CSRS |
| Total CSRS Withholding      | 128-138 | 11.2 | N | Retirement - CSRS |
| Total CSRS Contributions    | 139-149 | 11.2 | N | Retirement - CSRS |
| Total CSRS                  | 150-160 | 11.2 | N | Retirement - CSRS |

**RITS Bulk File Layout FERS FRAE**

**SF 2812 Data (Record 3 of 3)**

APPLICATION: RITS

FILE: 2812 File

FLOW: Input from Federal Program Agencies to RITS RECORD:  
SF 2812 Data (Record 3 of 3)

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**APPLICATION DATA**

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| FIELD                       | COLUMN  | LENGTH | TYPE | VALUE/DESCRIPTION     |
|-----------------------------|---------|--------|------|-----------------------|
| 2812 Data Record Type*      | 1-4     | 4      | N    | "2812"                |
| Transaction Code*           | 5-6     | 2      | N    | "03"                  |
| Regular Withholding         | 7-17    | 11.2   | N    | Retirement - FERS     |
| Regular Contribution        | 18-28   | 11.2   | N    | Retirement - FERS     |
| Rsve Tech Withholding       | 29-39   | 11.2   | N    | Retirement - FERS     |
| Rsve Tech Contributions     | 40-50   | 11.2   | N    | Retirement - FERS     |
| Special Withholding         | 51-61   | 11.2   | N    | Retirement - FERS     |
| Special Contributions       | 62-72   | 11.2   | N    | Retirement - FERS     |
| Salary Offset Contributions | 73-83   | 11.2   | N    | Retirement - FERS     |
| Military Dep. Withholding   | 84-94   | 11.2   | N    | Retirement - FERS     |
| Total FERS Withholding      | 95-105  | 11.2   | N    | Retirement - FERS     |
| Total FERS Contributions    | 106-116 | 11.2   | N    | Retirement - FERS     |
| Total FERS                  | 117-127 | 11.2   | N    | Retirement - FERS     |
| FERS RAE Reg. Withholding   | 128-138 | 11.2   | N    | Retirement - FERS RAE |



|                                  |         |      |   |                       |
|----------------------------------|---------|------|---|-----------------------|
| FERS RAE Reg. Contrib.           | 139-149 | 11.2 | N | Retirement - FERS RAE |
| FERS RAE Rsve. Tech. Withholding | 150-160 | 11.2 | N | Retirement - FERS RAE |
| FERS RAE Rsve. Tech. Contrib.    | 161-171 | 11.2 | N | Retirement - FERS RAE |
| FERS RAE Special Withholding     | 172-182 | 11.2 | N | Retirement - FERS RAE |
| FERS RAE Special Contributions   | 183-193 | 11.2 | N | Retirement - FERS RAE |
| FERS RAE Salary Offset           | 194-204 | 11.2 | N | Retirement - FERS RAE |

## RITS Bulk File Layout FERS FRAE

### SF 2812 Data (Record 3 of 3)

APPLICATION: RITS

FILE: 2812 File

FLOW: Input from Federal Program Agencies to RITS RECORD:  
SF 2812 Data (Record 3 of 3)

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### APPLICATION DATA

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| FIELD                               | COLUMN  | LENGTH | TYPE | VALUE/DESCRIPTION      |
|-------------------------------------|---------|--------|------|------------------------|
| FERS RAE Military Dep. Withholding  | 205-215 | 11.2   | N    | Retirement - FERS RAE  |
| Total FERS RAE Withholding          | 216-226 | 11.2   | N    | Retirement - FERS RAE  |
| Total FERS RAE Contributions        | 227-237 | 11.2   | N    | Retirement - FERS RAE  |
| Total FERS RAE                      | 238-248 | 11.2   | N    | Retirement - FERS RAE  |
| FERS FRAE Reg. Withholding          | 249-259 | 11.2   | N    | Retirement - FERS FRAE |
| FERS FRAE Reg. Contributions        | 260-270 | 11.2   | N    | Retirement - FERS FRAE |
| FERS FRAE Rsve. Tech. Withholding   | 271-281 | 11.2   | N    | Retirement - FERS FRAE |
| FERS FRAE Rsve. Tech. Contributions | 282-292 | 11.2   | N    | Retirement - FERS FRAE |
| FERS FRAE Special Withholding       | 293-303 | 11.2   | N    | Retirement - FERS FRAE |
| FERS FRAE Special Contributions     | 304-314 | 11.2   | N    | Retirement - FERS FRAE |
| FERS FRAE Salary Offset             | 315-325 | 11.2   | N    | Retirement - FERS FRAE |

|                                     |         |      |   |                        |
|-------------------------------------|---------|------|---|------------------------|
| FERS FRAE Military Dep. Withholding | 326-336 | 11.2 | N | Retirement - FERS FRAE |
| Total FERS FRAE Withholding         | 337-347 | 11.2 | N | Retirement - FERS FRAE |
| Total FERS FRAE Contributions       | 348-358 | 11.2 | N | Retirement - FERS FRAE |
| Total FERS FRAE                     | 359-369 | 11.2 | N | Retirement - FERS FRAE |
| Total Retirement Withholding        | 370-380 | 11.2 | N | Retirement             |
| Total Retirement Contributions      | 381-391 | 11.2 | N | Retirement             |
| Total Retirement                    | 392-402 | 11.2 | N | Retirement             |
| Grand Total Withholding             | 403-415 | 13.2 | N | Grand Totals           |
| Grand Total Contributions           | 416-428 | 13.2 | N | Grand Totals           |
| Grand Total                         | 429-441 | 13.2 | N | Grand Totals           |

## RITS Bulk File Layout FERS FRAE

### SF 2812A – Enrollment Code Record

APPLICATION: RITS  
 FILE: 2812A File  
 FLOW: Input from Federal Program Agencies to RITS  
 RECORD: SF 2812A – Enrollment Code Record

This record is optional and should be reported only if Health Benefit data is reported.

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### APPLICATION DATA

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| FIELD                            | COLUMN | LENGTH | TYPE | VALUE/DESCRIPTION |
|----------------------------------|--------|--------|------|-------------------|
| 2812 Data Record Type*           | 1-5    | 5      | N    | “2812A”           |
| Transaction Code*                | 6-7    | 2      | N    | “01”              |
| Enrollment Code #1               | 8-12   | 5      | A    | For example, AA2  |
| HB Withholding & Contribution #1 | 13-23  | 11.2   | N    |                   |
| Enrollment Code #2               | 24-28  | 5      | A    | For example, BB2  |
| HB Withholding & Contribution #2 | 29-39  | 11.2   | N    |                   |
| Filler                           | 40-199 | 160    | A    | Spaces            |

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## Bulk File Layout FERS FRAE

### SF 2812A – Totals Record

APPLICATION: RITS  
 FILE: 2812A File  
 FLOW: Input from Federal Program Agencies to RITS  
 RECORD: SF 2812A – Totals Record

This record is optional and should be reported only if Health Benefit data is reported.

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**APPLICATION DATA**

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| <b>FIELD</b>                         | <b>COLUMN</b> | <b>LENGTH</b> | <b>TYPE</b> | <b>VALUE/DESCRIPTION</b> |
|--------------------------------------|---------------|---------------|-------------|--------------------------|
| 2812 Data Record Type*               | 1-5           | 5             | N           | "2812A"                  |
| Transaction Code*                    | 6-7           | 2             | N           | "02"                     |
| Total Number of Enrollment Codes     | 8-12          | 5             | N           | For example, 99999       |
| Total HB Withholding & Contributions | 13-23         | 11.2          | N           |                          |

**Document Revision History:**

| <b>Version</b> | <b>Date</b> | <b>Description</b>                                      |
|----------------|-------------|---|
| 0.1            | 1/8/13      | Initial Draft   |
| 1.0            | 2/26/13     | Effective Date November 2013, finalized as version 1.0  |
| 1.1            | 6/24/14     | Updated to include FERS FRAE record changes             |
| 1.2            | 7/8/14      | Updated to include FERS FRAE record changes             |
| 1.3            | 7/22/14     | Page 11 type corrected                                  |
| 1.4            | 5/22/19     | Format changes, removed app overview; no layout changes |
| 1.5            | 11/16/2023  | Bulk File Processing Constraints                        |