

SCHEDULE 13G

(Under the Securities Exchange Act of 1934)
(Amendment No. 7)*

MTS SYSTEMS CORP.

(Name of Issuer)

COMMON STOCK

(Title of Class of Securities)

55377710

(Cusip Number)

Check the following box if a fee is being paid with this statement
[]. (A fee is not required only if the filing person: (1) has a
previous statement on file reporting beneficial ownership of more
than five percent of the class of securities described in Item 1;
and (2) has filed no amendment subsequent thereto reporting
beneficial ownership of more than five percent or less of such
class.) (See Rule 13d-7.)

*The remainder of this cover page shall be filled out for a
reporting person's initial filing of this form with respect to the
subject class of securities and for any subsequent amendment
containing information which would alter the disclosures provided in
a prior cover page.

The information required in the remainder of this cover page shall
not be deemed to be "filed" for the purpose of Section 18 of the
Securities Exchange Act of 1934 ("Act") or otherwise subject to the
liabilities of that section of the Act but shall be subject to all
other provisions of the Act (however, see the Notes.)

[Continued on the following page(s)]

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1. Name of reporting person
S.S. or I.R.S. identification no. of above person

Wellington Management Company
04-2683227

2. Check the appropriate box if a member of a group*
(a)() (b)()

3. SEC use only

4. Citizenship or place of organization
Massachusetts

Number of
shares
beneficially
owned by
each
Reporting

5. Sole Voting Power
0

6. Shared Voting Power
0

7. Sole Dispositive Power

person
with

0

8. Shared Dispositive Power

264,300

9. Aggregate amount beneficially owned by each reporting person

264,300

10. Check box if the aggregate amount in row (9) includes certain shares*

11. Percent of class represented by amount in row 9

5.74%

12. Type of Reporting person*

IA

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SCHEDULE 13G

ITEM 1(A): NAME OF ISSUER:

MTS SYSTEMS CORP.

1(B): ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

1400 Technology Drive
Eden Prairie, MN 55344

ITEM 2(A): NAME OF PERSON FILING:

Wellington Management Company ("WMC")

ITEM 2(B): ADDRESS OF PRINCIPAL BUSINESS OFFICE:

75 State Street
Boston, Massachusetts 02109

ITEM 2(C): CITIZENSHIP:

See Item 4 of Cover Page

ITEM 2(D): TITLE OF CLASS OF SECURITIES:

See Cover Page

ITEM 2(E): CUSIP NUMBER:

See Cover Page

ITEM 3: TYPE OF REPORTING PERSON:

See Item 12 of Cover Page

ITEM 4: OWNERSHIP:

(a) AMOUNT BENEFICIALLY OWNED: WMC, in its capacity as investment adviser, may be deemed the beneficial owner of 264,300 shares of common stock of the Issuer which are owned by numerous investment counselling clients.

(b) PERCENT OF CLASS: 5.74%

(c) For information on voting and dispositive power with respect to the above listed shares, see Items 5 - 8 of Cover Page.

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ITEM 5: OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS:

ITEM 6: OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:

Shares as to which this Schedule is filed are owned by a variety of

investment advisory clients of the person filing this Schedule, which clients receive dividends and the proceeds from the sale of such shares. No such client is known to have such interest with respect to more than five percent of the class except as follows:

None

ITEM 7: IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY:

Wellington Trust Company, N.A. (BK)

ITEM 8: IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP:

Not Applicable

ITEM 9: NOTICE OF DISSOLUTION OF GROUP:

Not Applicable

ITEM 10: CERTIFICATION:

By signing below, I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect.

SIGNATURE:

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete, and correct.

Date:----- January 30,

1995

Signature: --//Leslie A. Meinhart//

Name/Title: LESLIE A. MEINHART

Senior Regulatory Analyst