UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): May 6, 2010



(Exact name of registrant as specified in its charter)

| Texas | 1-7259 | 74-1563240 |
|---|---|--------------------------------------|
| (State or other jurisdiction of incorporation) | (Commission File Number) | (I.R.S. Employer Identification No.) |
| P. O. Box 36611, Dallas, Texas | | 75235-1611 |
| (Address of principal executive offices) | - | (Zip Code) |
| Registrant's | telephone number, including area code: (214 | 1) 792-4000 |
| | Not Applicable | |
| Former | name or former address, if changed since last | report |
| Check the appropriate box below if the Form 8-K filing is intended filing obligation of the registrant under any of the following provisi | , , | |
| [] Written communications pursuant to Rule 425 under the 9 (17 CFR 230.425) | Securities Act | |
| [] Soliciting material pursuant to Rule 14a-12 under the Exc | change Act (17 | |

[]

CFR 240.14a-12)

Exchange Act (17 CFR 240.14d-2(b))

Exchange Act (17 CFR 240.13e-4(c))

Pre-commencement communications pursuant to Rule 14d-2(b) under the

Pre-commencement communications pursuant to Rule 13e-4(c) under the

Item 7.01 Regulation FD Disclosure.

On May 6, 2010, the Registrant issued a press release announcing its traffic results for April 2010. The press release is furnished herewith as Exhibit 99.1 and is incorporated by reference into this Item 7.01.

The information furnished in this Item 7.01 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

99.1 Registrant's April 2010 Traffic Release.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SOUTHWEST AIRLINES CO.

May 6, 2010

By /s/ Laura Wright

Laura Wright
Chief Financial Officer
(Principal Financial and
Accounting Officer)

Exhibit Index

Exhibit No. Description

99.1 Registrant's April 2010 Traffic Release.

CONTACT: Investor Relations (214) 792-4415

SOUTHWEST AIRLINES REPORTS APRIL TRAFFIC

DALLAS, TEXAS – May 6, 2010 -- Southwest Airlines Co. (NYSE: LUV) announced today that the Company flew 6.5 billion revenue passenger miles (RPMs) in April 2010, a 0.6 percent decrease from the RPMs flown in April 2009. Available seat miles (ASMs) decreased 2.9 percent to 8.2 billion from the April 2009 level of 8.5 billion. The load factor for the month was 78.8 percent, compared to 77.0 percent for the same period last year. For April 2010, passenger revenue per ASM is estimated to have increased in the 18 to 19 percent range as compared to April 2009.

For the first four months of 2010, Southwest flew 23.6 billion RPMs, compared to 23.4 billion RPMs for the same period in 2009, an increase of 1.0 percent. Available seat miles decreased 5.5 percent to 30.8 billion from the 2009 level of 32.6 billion. The year-to-date load factor was 76.7 percent, compared to 71.7 percent for the same period last year.

This release, as well as past news releases on Southwest, are available online at southwest.com.

/more

SOUTHWEST AIRLINES CO. PRELIMINARY COMPARATIVE TRAFFIC STATISTICS

| | APRIL | | | |
|-------------------------------|-----------|-----------|----------|--|
| | 2010 | 2009 | CHANGE | |
| Revenue passengers carried | 7,492,059 | 7,551,516 | (0.8)% | |
| Enplaned passengers | 8,911,492 | 8,814,504 | 1.1% | |
| Revenue passenger miles (000) | 6,477,421 | 6,517,856 | (0.6)% | |
| Available seat miles (000) | 8,215,474 | 8,463,511 | (2.9)% | |
| Load factor | 78.8% | 77.0% | 1.8 pts. | |
| Average length of haul | 865 | 863 | 0.2% | |
| Trips flown | 93,719 | 96,457 | (2.8)% | |

| | YEAR-TO-DATE | | | |
|-------------------------------|--------------|------------|----------|--|
| | 2010 | 2009 | CHANGE | |
| | | | | |
| Revenue passengers carried | 27,468,894 | 27,311,206 | 0.6% | |
| Enplaned passengers | 32,605,956 | 31,864,494 | 2.3% | |
| Revenue passenger miles (000) | 23,639,135 | 23,409,485 | 1.0% | |
| Available seat miles (000) | 30,834,934 | 32,635,186 | (5.5)% | |
| Load factor | 76.7% | 71.7% | 5.0 pts. | |
| Average length of haul | 861 | 857 | 0.5% | |
| Trips flown | 355,611 | 375,592 | (5.3)% | |