
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16 OF THE
SECURITIES EXCHANGE ACT OF 1934**

For the month of September 2011

TAT TECHNOLOGIES LTD.
(Translation of registrant's name into English)

P.O.BOX 80, Gedera 70750 Israel
(Address of registrant's principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101 (b) (1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101 (b) (7): ☐

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- _____

TAT Technologies Ltd.

6-K Items

1. Press Release re TAT Technologies Reports Purchase of its Shares by Controlling Stockholder.
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TAT Technologies Reports Purchase of its Shares by Controlling Stockholder

GEDERA, Israel, Wednesday, September 7, 2011/PRNewswire-FirstCall/--TAT Technologies Ltd. (NASDAQ: TATT – News), a leading provider of services and products to the commercial and military aerospace and ground defense industries, reported today that its controlling stockholder, Isal Amlat Investments (1993) Ltd. (“Isal”) purchased an aggregate of 15,000 ordinary shares of TAT between September 1, 2011 and September 7, 2011 at an average price of 20.36 NIS per share. Such purchases were made on the Tel Aviv Stock Exchange. Following such purchases, Isal beneficially owns 4,747,351 ordinary shares, representing 53.85 % of TAT’s ordinary shares.

About TAT Technologies LTD

TAT Technologies LTD is a leading provider of services and products to the commercial and military aerospace and ground defense industries.

TAT operates under four segments: (i) Original Equipment Manufacturing or “OEM” of Heat Management Solutions (ii) OEM of Electric Motion Systems (iii) Heat Transfer Services and Products and (iv) Maintenance, Repair and Overhaul or “MRO” services of Aviation Components.

TAT’s activities in the area of **OEM of Heat Management Solutions** primarily include the design, development, manufacture and sale of (i) a broad range of heat transfer components (such as heat exchangers, pre-coolers and oil/fuel hydraulic coolers) used in mechanical and electronic systems on-board commercial, military and business aircraft; (ii) environmental control and cooling systems on board aircraft and for ground applications; and (iii) a variety of other electronic and mechanical aircraft accessories and systems such as pumps, valves, power systems and turbines.

TAT’s activities in the area of **OEM of Electric Motion Systems** primarily include the design, development, manufacture and sale of a broad range of electrical motor applications for airborne and ground systems.

TAT’s activities in the area of **Heat Transfer Services and Products** include the maintenance, repair and overhaul of heat transfer equipment and in a lesser extent, the manufacturing of certain heat transfer products. TAT’s Limco subsidiary operates FAA certified repair station, which provides heat transfer MRO services and products for airlines, air cargo carriers, maintenance service centers and the military.

TAT’s activities in the area of **MRO services for Aviation Components** include the maintenance, repair and overhaul of APUs, Landing Gear and other aircraft components. TAT’s Piedmont subsidiary operates an FAA certified repair station, which provides aircraft component MRO services for airlines, air cargo carriers, maintenance service centers and the military.

TAT also holds approximately 30.3% of the equity of First Aviation Services, a world-wide distributor of products and services to the aerospace industry and a one-stop-shop for MRO services (wheels, breaks, propellers and landing gear) for the General Aviation Industry.

TAT's executive offices are located in the Re'em Industrial Park, Neta Boulevard, Bnei Ayish, Gedera 70750, Israel, and TAT's telephone number is 972-8-862-8500.

Safe Harbor for Forward-Looking Statements

This press release contains forward-looking statements which include, without limitation, statements regarding possible or assumed future operation results. These statements are hereby identified as "forward-looking statements" for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve risks and uncertainties that could cause our results to differ materially from management's current expectations. Actual results and performance can also be influenced by other risks that we face in running our operations including, but are not limited to, general business conditions in the airline industry, changes in demand for our services and products, the timing and amount or cancellation of orders, the price and continuity of supply of component parts used in our operations, and other risks detailed from time to time in the company's filings with the Securities Exchange Commission, including, its annual report on form 20-F and its periodic reports on form 6-K. These documents contain and identify other important factors that could cause actual results to differ materially from those contained in our projections or forward-looking statements. Stockholders and other readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update publicly or revise any forward-looking statement.

For more information of TAT Technologies, please visit our web-site: www.tat-technologies.com

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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, thereto duly authorized.

TAT TECHNOLOGIES LTD.
(Registrant)

By: /s/ Yaron Shalem

Yaron Shalem
Chief Financial Officer

Date: September 7, 2011
