
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

F O R M 6-K

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

For the month of May 2012

TAT TECHNOLOGIES LTD.
(Name of Registrant)

P.O.BOX 80, Gadera 70750 Israel
(Address of Principal Executive Office)

Indicate by check mark whether the registrant files or will file annual reports under cover of 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 by furnishing the information contained in this Form, the registrant 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- _____

6-K Items

1. Press Release dated May 22, 2012 re TAT Technologies Reporting First Quarter of Year 2012 Results.

Press Release

Source: TAT Technologies Limited

TAT Technologies Reports Year 2012 First Quarter Results

GEDERA, Israel, Tuesday, May 22, 2012 /PRNewswire / - 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 its results for the three month period ended March 31, 2012.

Financial Highlights:

TAT announced revenues of \$20.7 million and a net income of \$0.6 million for the three months ended March 31, 2012, compared to revenues of \$21.4 million with net income of \$1.5 million for the three months ended March 31, 2011.

During the first quarter of 2012, revenues were impacted by (i) the increase in revenues in the Heat Transfer Services and Products operating segment and the MRO Services for Aviation Components operating segment; and (ii) the significant decrease in revenues in the OEM of Electric Motion Systems due to growing weakness in the relevant markets. This decrease is a continuation of the decrease in revenues this segment had experienced during 2011.

Revenue breakdown by the operating segments for the three months period ended March 31, 2012 and 2011, respectively, was as follows:

	Three Months Ended March 31,					
	2012		2011		% of Change Between Periods	
	Revenues in Thousands	% of Total Revenues	Revenues in Thousands	% of Total Revenues		
	Unaudited		Unaudited			
Revenues						
OEM of Heat Management Solutions	\$ 7,684	37.2%	\$ 7,640	35.7%		0.6%
Heat Transfer Services and Products	6,783	32.8%	6,467	30.2%		4.9%
MRO services for Aviation Components	5,003	24.2%	4,799	22.4%		4.3%
OEM of Electric Motion Systems	1,802	8.7%	3,570	16.7%		(49.5)%
Eliminations	(595)	(2.9)%	(1,074)	(5.0)%		(44.6)%
Total revenues	\$ 20,677	100.0%	\$ 21,402	100.0%		(3.4)%

Mr. Itsik Maaravi, TAT's CEO commented:

"The results of 2012 first quarter reflect the continuation of the improving trend in our dominant operating segments – the OEM of Heat Management Solutions and Heat Transfer Services and Products, as well as in our MRO for Aviation Components operating segment. In each of these segments we continued to increase revenues compared to the first quarter of 2011. These improvements are attributed to the increase in our marketing and sales activities during 2010 and 2011 as well as to our rigorous and continuing activity to improve our production flow and yields.

During the first quarter we experienced a notable decrease in revenues and margins in the OEM of Electric Motion Systems compared to the same period in 2011, resulting from growing weakness in the defense markets relevant to this segment. This decrease is a continuation of the decrease in revenues this segment had experienced during 2011.

We are continuing to preserve a strong balance sheet with limited liabilities, impressive working capital and sufficient financial assets to support the growth of our operations.

We are encouraged by global trends of increased traffic reported by airlines around the world. We are witnessing a steady demand for MRO services, as well as positive indications from OEMs in the aerospace and defense industries, which impact our businesses

We continue to focus on our core capabilities while expanding our business offerings worldwide.

We believe that our efforts along with continued improvement in the global aviation industry, will sustain the improved trend line of our performance further in 2012".

TAT TECHNOLOGIES AND ITS SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited, in thousands, except share data)

	March 31, 2012	March 31, 2011
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 19,593	\$ 28,820
Short-term bank deposits	10,000	-
Marketable securities at fair value	1,900	2,547
Short-term restricted deposits	1,255	5,081
Trade accounts receivable (net of allowance for doubtful accounts of \$456 and \$2,527 as of March 31, 2012 and 2011, respectively)	19,516	20,072
Other accounts receivable and prepaid expenses	5,818	7,583
Inventories, net	31,754	33,152
Total current assets	89,836	97,255
Long-term assets:		
Long-term restricted deposits	2,000	-
Investment in affiliated company	4,980	4,535
Funds in respect of employee right upon retirement	3,082	2,959
Long-term deferred tax	3,474	1,128
Property, plant and equipment, net	12,659	14,356
Intangible assets, net	-	1,736
Goodwill, net	1,072	1,144
Total Long-term assets	27,267	25,858
Total assets	\$ 117,103	\$ 123,113
LIABILITIES AND EQUITY		
Current Liabilities:		
Current maturities of long-term loans	5,550	9,556
Trade accounts payables	5,817	7,796
Other accounts payable and accrued expenses	6,367	7,371
Total current liabilities	17,734	24,723
Long-term liabilities:		
Long-term loans, net of current maturities	4,381	798
Other accounts payable	86	129
Liability in respect of employee rights upon retirement	3,628	3,531
Long-term deferred tax liability	1,368	775
Total long-term liabilities	9,463	5,233
EQUITY:		
Share capital		
Ordinary shares of NIS 0.9 par value – Authorized: 10,000,000 shares at March 31, 2012 and 2011; Issued and outstanding: 9,073,043 and 8,815,003 shares, respectively at March 31, 2012 and 2011	2,790	2,790
Additional paid-in capital	64,402	64,449
Treasury stock, at cost, 258,040 shares at March 31, 2012 and 2011, respectively	(2,018)	(2,018)
Accumulated other comprehensive loss	(823)	(249)
Retained earnings	22,816	24,964
Total TAT Technologies shareholders' equity	87,167	89,936
Non controlling interest	2,739	3,221
Total equity:	89,906	93,157
Total liabilities and equity	\$ 117,103	\$ 123,113

TAT TECHNOLOGIES AND ITS SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(Unaudited, in thousands, except share and per share data)

	Three months ended March 31,	
	2012	2011
Revenues:		
OEM of Heat Management Solutions	\$ 7,684	\$ 7,640
Heat Transfer Services and Product	6,783	6,467
MRO services for Aviation Components	5,003	4,799
OEM of Electric Motion Systems	1,802	3,570
Eliminations	(595)	(1,074)
	<u>20,677</u>	<u>21,402</u>
Cost and operating expenses:		
OEM of Heat Management Solutions	5,586	5,392
Heat Transfer Services and Products	5,029	4,698
MRO services for Aviation Components	4,374	4,067
OEM of Electric Motion Systems	1,711	2,487
Eliminations	(597)	(952)
	<u>16,103</u>	<u>15,692</u>
Gross Profit	<u>4,574</u>	<u>5,710</u>
Research and development, net	174	265
Selling and marketing expenses	889	882
General and administrative expenses	2,995	2,469
Other expenses	14	-
	<u>4,072</u>	<u>3,616</u>
Operating income	<u>502</u>	<u>2,094</u>
Financial expense	(556)	(308)
Financial income	816	517
Income before income taxes	762	2,303
Taxes on income	268	780
Net income after income taxes	494	1,523
Share in results of affiliated company	(40)	86
Net income	454	1,609
Net loss (income) attributable to Non controlling interest	130	(107)
Net income attributable to TAT Technologies shareholders	<u>\$ 584</u>	<u>\$ 1,502</u>
Earning per share		
Basic and diluted net income per share attributable to controlling interest	\$ 0.06	\$ 0.17
Weighted average number of shares – basic and diluted	8,815,003	8,815,003

Management's Discussion and Analysis of Financial Condition and Results of Operations Background

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

OEM of Heat Management Solutions primarily includes 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.

Heat Transfer Services and Products primarily includes 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 an FAA certified repair station, which provides heat transfer MRO services and products for airlines, air cargo carriers, maintenance service centers and the military.

MRO services for Aviation Components primarily includes 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.

OEM of Electric Motion Systems primarily includes the design, development, manufacture and sale of a broad range of electrical motor applications for airborne and ground systems.

Three months ended March 31, 2012 compared with three months ended March 31, 2011

Revenues. Total revenues for the three months ended March 31, 2012, were \$20.7 million compared to \$21.4 million for the three months ended March 31, 2011, a moderate decrease of 3.4%. This reflects (i) the increase in revenues in the Heat Transfer Services and Products operating segment; (ii) the increase in revenues in the MRO Services for Aviation Components operating segment; and (iii) similar revenues in the OEM of Heat Management Solutions compared to the prior period; (iv) a significant decrease in revenues in the OEM of Electric Motion Systems operating segment due to growing weakness in the defense markets relevant to this segment. This decrease is a continuation to the gradual decrease in revenues this segment had experienced during 2011.

Cost of revenues. Cost of revenues was \$16.1 million for the three months ended March 31, 2012 compared to \$15.7 million for the three months ended March 31, 2011, an increase of 2.6%. This reflects (i) the increase in cost of revenues in the OEM of Heat Management Solutions operating segment; (ii) the increase in cost of revenues in the Heat Transfer Services and Products operating segment; (iii) the increase in cost of revenues in the MRO Services for Aviation Components operating segment, which is primarily attributable to the increase in revenues in these operating segments; offset by (iv) the decrease in cost of revenues in the OEM of Electric Motion Systems operating segment, which is primarily attributable to the decrease in revenues in this operating segment.

Cost of revenues as a percentage of revenues increased to 78% for the three months ended March 31, 2012, compared to 73% for the three months ended March 31, 2011. This increase is primarily attributable to product mix with lower margin products sold during this quarter in all of the Company's operating segments, as well as to a higher rate of fixed production costs in the OEM of Electric Motion Systems operating segment resulting from the decrease in revenues in this segment.

Research and development, net. Research and Development expenses were \$0.2 million for the three months ended March 31, 2012, compared to \$0.3 million for the three months ended March 31, 2011, and are related to new products and technologies within the OEM operations in Israel. Research and Development expenses as a percentage of revenues were 0.8% for the three months ended March 31, 2012, compared to 1.2% for the three months ended March 31, 2011. TAT expects to continue to incur and record research and development expenses in coming years.

Selling and marketing expenses. Selling and marketing expenses were \$0.9 million for the three months ended March 31, 2012, similar to the selling and marketing expenses for the three months ended March 31, 2011. This was impacted by the increase in selling and marketing expenses in the OEM of Heat Management Solutions operating segment, primarily attributable to increased payroll costs and exhibition expenses; offset by the decrease in selling and marketing expenses in the MRO Services for Aviation Components operating segment, primarily attributable to a decrease in exhibition expenses.

Selling and marketing expenses as a percentage of revenues were 4.3% for the three months ended March 31, 2012, similar to 4.1% for the three months ended March 31, 2011. TAT expects to continue to invest additional resources in selling and marketing activities in coming years.

General and administrative expenses. General and administrative expenses were \$3.0 million for the three months ended March 31, 2012, compared to \$2.5 million for the three months ended March 31, 2011, an increase of 21%. The increase in general and administrative expenses was impacted by (i) the increase in general and administrative expenses in the MRO Services for Aviation Components operating segment primarily attributable to a provision recorded for doubtful debt; (ii) the increase in general and administrative expenses in the Heat Transfer Services and Products operating segment primarily attributable to employee related expenses; (iii) similar general and administrative expenses in the OEM of Electric Motion Systems operating segment; partially offset by (iv) the decrease in general and administrative expenses in the OEM of Heat Management Solutions operating segment, primarily attributable to decreased payroll costs.

Operating income. For the three months ended March 31, 2012, TAT reported operating income of \$0.5 million compared to operating income of \$2.1 million for the three months ended March 31, 2011. The decrease in operating income is primarily attributable to the decreased revenues and the increase in general and administrative expenses discussed above.

Financial expense. Financial expense for the three months ended March 31, 2012, was \$0.6 million compared to financial expense of \$0.3 million for the three months ended March 31, 2011. Financial expense during the quarter primarily resulted from changes in exchange rates between the U.S. dollar and the Israeli Shekel and between the U.S. dollar and the Euro.

Financial income. Financial income for the three months ended March 31, 2012, was \$0.8 million, compared to \$0.5 million for the three months ended March 31, 2011. Financial income during the quarter primarily resulted from changes in exchange rates between the U.S. dollar and the Israeli Shekel and between the U.S. dollar and the Euro, from the change in the fair value of unrealized hedging transactions and from realized profits from hedging transactions.

Taxes. Total tax expense for the three months ended March 31, 2012, was \$0.3 million, compared to total tax expense of \$0.8 million for the three months ended March 31, 2011. The decrease in tax expense for the three months ended March 31, 2012, is primarily attributable to (i) a decrease in pre-tax income in the Heat Transfer Services and Products operating segment; (ii) pre-tax losses incurred in the MRO Services for Aviation Components operating segment; (iii) a decrease in pre-tax income in the OEM of Heat Management Solutions operating segment; and (iv) pre-tax losses incurred in the OEM of Electric Motion Systems operating segment.

Share in Results of affiliated Company. TAT recognized an immaterial loss from its 30% interest in FAVS's results for the three months ended March 31, 2012 compared to income of \$0.1 million for the three months ended March 31, 2011.

Net income (loss) attributable to noncontrolling interest. TAT recognized net loss of \$0.1 million attributable to noncontrolling interest for the three months ended March 31, 2012, compared to net income of \$0.1 million attributable to noncontrolling interest for the three months ended March 31, 2011. In both periods net income (loss) attributable to noncontrolling interest was attributable to our 70% held Bental subsidiary.

Net income attributable to controlling interest. TAT recognized a net income of \$0.6 million for the three months ended March 31, 2012 compared to net income of \$1.5 million for the three months ended March 31, 2011.

Liquidity and Capital Resources

As of March 31, 2012, TAT had cash and cash equivalents and short-term bank deposits of \$29.6 million, marketable securities of \$1.9 million and restricted cash of \$3.3 million, which equals \$34.8 million of financial assets, compared with cash and cash equivalents and short-term deposits of \$28.8 million, short term investments and marketable securities of \$2.5 million and restricted cash of \$5.1 million, which equals \$36.4 million of financial assets as of March 31, 2011.

As of March 31, 2012 the Company met all financial covenants related to its loans and credit facilities.

Seasonality

In the OEM industry in general and in TAT's OEM businesses in particular, the majority of customers operate based on annual budgets and tend to utilize during the fiscal fourth quarter the remaining balance of any un-used budgets. This trend is more typical with customers from the defense industry. Accordingly, TAT is more likely to generate increased revenues in the OEM businesses (such as TAT's OEM of Heat Management Solutions and OEM of Electric Motion Systems) during the fiscal fourth quarter. The aviation industry is known for its highest traffic in the third quarter, primarily attributable to summer vacations. As a result, during the fiscal third quarter, airlines tend to postpone, to the extent possible, maintenance and repair of their aircraft to minimize aircraft grounding. Accordingly, TAT is more likely to notice decreased revenues in the MRO businesses (such as TAT's MRO for Aviation Components and Heat Transfer Services and Products) during the fiscal third quarter with recovery during subsequent quarters.

Subsequent Event

On April 22, 2012, subsequent to the balance sheet date, TAT's Board declared a cash dividend in the total amount of \$2.5 million (approximately NIS9.4 million), or \$0.283 per share (approximately NIS1.065 per share), for all of the shareholders of TAT. The dividend was paid on May 17, 2012 to shareholders of record on May 3, 2012.

On May 21, 2012, TAT's Board of Directors approved a stock repurchase plan under Rule 10b5-1 of the Securities Exchange Act of 1934. The plan will be in effect for a period of 6 months (subject to extension) and will provide for the purchase of shares in an aggregate amount of up to \$0.5 million U.S. dollars. Such plan replaces and supersedes any other repurchase plan approved by TAT's Board of Directors' on February 21, 2012

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

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

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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.

SIGNATURE

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, thereunto duly authorized.

TAT TECHNOLOGIES LTD.
(Registrant)

By: /s/ Yaron Shalem
Yaron Shalem
Chief Financial Officer

Date: May 22, 2012