



United States of America  
FEDERAL TRADE COMMISSION  
WASHINGTON, DC 20580

Michael R. Moiseyev  
Assistant Director  
Bureau of Competition ~ Mergers I  
Phone: (202) 326-3106  
Email: [mmoiseyev@ftc.gov](mailto:mmoiseyev@ftc.gov)

June 6, 2013

**Via Email**

Susan P. Raps, Esquire  
Deputy General Counsel (Acquisition & Logistics)  
Department of Defense Office of General Counsel  
1600 Defense Pentagon (Room 3B652)  
Washington, DC 20301-1600

Re: GenCorp Inc.'s Proposed Acquisition of Pratt & Whitney Rocketdyne from  
United Technologies Corp., FTC File No. 121-0182

Dear Susan:

The Federal Trade Commission staff has been investigating the above-referenced transaction since August 2012, in order to determine whether the transaction is likely to violate the federal antitrust laws. Both Pratt & Whitney Rocketdyne ("PWR") and GenCorp Inc. ("GenCorp"), through its wholly owned subsidiary Aerojet-General Corporation ("Aerojet"), design, develop, manufacture, sell and support liquid rocket propulsion systems for launch vehicles, spacecraft, strategic missile systems, and ballistic missile defense systems. Throughout our investigation, we have been in close contact with and have benefited from the input of the Department of Defense as we examined the acquisition's potential impact on competition in a number of discrete relevant markets.

Based on the evidence gathered in our investigation, it appears that the proposed acquisition is likely to have a substantial adverse effect on competition in the U.S. market for liquid divert and attitude control systems ("LDACS"). LDACS are very high-performance, small pressure-fed liquid rocket propulsion systems that have a highly specialized application on missile defense interceptors. The acquisition would consolidate the only two competitively viable suppliers of LDACS. Because the relevant market is insulated from new competition due to the existence of significant barriers to entry, the acquisition will likely provide Aerojet a durable monopoly in this market. The anticipated result of such a monopoly would be an increase in price and a reduction in the pace of innovation for LDACS. The Department of Defense would be negatively affected, as it is the ultimate customer for LDACS and the primary beneficiary of competition in this market. For this reason, absent countervailing public interest considerations, the proposed acquisition would violate Section 7 of the Clayton Act and Section 5 of the Federal Trade Commission Act if consummated.

Staff's analysis adheres to the analytical framework set out in the *U.S. Department of Justice & Federal Trade Commission Horizontal Merger Guidelines* ("Merger Guidelines"). The starting point for that analysis is the definition of the relevant product and geographic markets at issue. Our analysis of the evidence gathered in our investigation, including documents submitted by the parties and testimony of industry participants, reveals that LDACS is the relevant product market in which to assess the likely competitive effects of the proposed acquisition. Customers choose the appropriate propulsion system for their weapon systems based primarily on performance criteria. For certain applications, there are no other technologies available today, or likely to be available in the foreseeable future, that can match the performance provided by liquid DACS. Customers who require the higher performance of LDACS for a current or future missile defense program are thus unlikely to consider other technologies to be reasonably interchangeable with LDACS.<sup>1</sup> LDACS therefore constitute the relevant product market. We conclude that the relevant geographic market is the United States, given the national security imperatives relating to this critical technology.<sup>2</sup> Past and present DOD policies limit foreign companies' ability to compete effectively for critical components on missile defense programs, federal laws regulate government purchasing from foreign sources, and customers prefer domestic suppliers because of the burden of complying with federal regulations restricting sharing missile technology with foreign persons. Having determined the relevant product and geographic market, the identification of participants in the relevant market and the increase in market concentration produced by the acquisition is straightforward since there are only two suppliers of LDACS in the United States: Aerojet and PWR. Thus, the transaction creates a monopoly, which is presumptively anticompetitive and routinely understood to create a high risk of higher prices and diminished innovation.<sup>3</sup>

The next area of inquiry is to determine whether the market of concern is susceptible to new entry that would prevent or alleviate any anticompetitive effects that might otherwise result from the acquisition. The available evidence demonstrates that significant barriers to entry exist because of the difficulties, time and expense involved with acquiring the requisite highly specialized technical skills and capabilities. The expertise required to develop LDACS is unique and distinct from any other type of small-scale rocket propulsion systems. Moreover, the emphasis that risk-averse customers place on demonstrated prior performance and flight-proven hardware represents an additional significant barrier to entry that discourages potential entrants operating in adjacent markets from making the investment of time and money necessary to enter the market. In this context, the monopolist's behavior would not be tempered by the threat of new competition.

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<sup>1</sup> We note that Aerojet is also the leading supplier of solid DACS, which is the next-closest substitute product for LDACS. Even if the relevant market were expanded to include solid DACS, the proposed transaction would combine the two leading, and two of only three, suppliers of DACS. The resulting anticompetitive effects would therefore be similar whether the market is limited to LDACS or defined more broadly.

<sup>2</sup> In any case, no foreign suppliers possess technical expertise or capabilities comparable to Aerojet or PWR in the field of LDACS.

<sup>3</sup> *Merger Guidelines* § 5.3.

Where, as here, there are no reasonable substitute products and there is little prospect of significant new entry, a consolidation of the only two market participants is likely to create a durable monopoly. In such a situation, a high likelihood of anticompetitive effects is presumed, and can be expected to result in higher prices and inferior products. Balanced against these clear harms is the possibility that the merger will produce cost savings, development synergies or other customer benefits. We find few, if any, cognizable efficiencies directly relating to the LDACS market, however, and certainly not of the extraordinary character necessary to outweigh the substantial anticompetitive potential of a merger-to-monopoly.<sup>4</sup> Ordinarily, this would end the efficiency inquiry in a Section 7 case. However, we also analyzed the efficiencies that the parties assert the transaction is likely to produce in other liquid rocket engine markets.<sup>5</sup> After scrutinizing the out-of-market efficiency claims that have been advanced, we are unable to conclude that the cognizable efficiencies likely to result from the acquisition are sufficient to offset the acquisition's potential harm. To begin with, the vast majority of the purported cost savings could be realized by another acquirer or by PWR independently and therefore do not depend on the completion of the anticompetitive transaction before us. In other cases, the claimed savings are vague or speculative, and defy verification. And evidence from our investigation shows that many of the parties' efficiency claims are demonstrably overstated. In sum, the parties' efficiency claims fall well short of what would be required to conclude that the transaction is not anticompetitive and do not change our conclusion that the proposed transaction will likely result in higher prices and inferior LDACS products.

That being said, we understand from our discussions that the Department of Defense has identified potential non-economic benefits that may result from the transaction, including sustainment of certain industrial base assets and capabilities necessary to meet the Department of Defense's space launch requirements. Non-economic benefits such as preservation of the industrial base and merger-derived opportunities to maintain or enhance readiness or meet surge requirements are national security considerations. It has been and continues to be the Commission's practice to defer to the Department of Defense's assessment of those benefits and to accord that assessment significant weight in exercising the Commission's prosecutorial discretion. If the Department of Defense believes that the proposed acquisition is necessary to achieve important benefits of this nature, that would clearly impact the Commission's decision of whether, overall, a challenge of the transaction would be in the public interest.

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<sup>4</sup> *Id.* at § 10 ("Efficiencies almost never justify a merger to monopoly, or near-monopoly.").

<sup>5</sup> Normally, the Agencies only consider the cognizable cost savings and other efficiencies relating to the market of concern. *Id.* at § 10 n.14 ("The Agencies normally assess competition in each relevant market affected by a merger independently and normally will challenge a merger if it is likely to be anticompetitive in any relevant market."). Because of the unique circumstances presented in this case—namely, the Department of Defense's belief that a divestiture would imperil U.S. national security interests and that the transaction's potential out-of-market efficiencies would be beneficial—we also evaluated other potential efficiencies that might be sacrificed if the transaction were blocked or abandoned.

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Thank you again for your cooperation and assistance with our investigation. I look forward to continuing our dialog with you and your colleagues regarding this transaction. Please feel free to contact me should you have any questions regarding this matter.

Yours truly,

A handwritten signature in blue ink, appearing to read "M. Moiseyev", with a large, sweeping flourish extending to the right.

Michael R. Moiseyev  
Assistant Director  
Bureau of Competition