



DIVISION OF  
CORPORATION FINANCE

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

May 4, 2012

Via E-Mail

Mr. Anthony L. Trunzo  
Chief Financial Officer  
Flir Systems, Inc.  
27700 SW Parkway Avenue  
Wilsonville, Oregon 97070

**Re: Flir Systems, Inc.  
Form 10-K for the year ended December 31, 2011  
Filed February 29, 2012  
File No. 000-21918**

Dear Mr. Trunzo:

We have reviewed your letter dated April 20, 2012, in response to the Staff's letter dated March 28, 2012 and have the following additional comments. Unless otherwise indicated, you should revise your disclosure in future filings in response to our comments. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

Management's Discussion and Analysis of Financial Condition and Results of Operations  
Consolidated Operating Results  
Segment Operating Results, page 29

1. We note your responses to our prior comments 1 and 2 but do not believe that your response satisfactorily addressed the concerns raised in our prior comment. In this regard, we do not believe that addressing individual factors that have affected gross margin in their respective years is sufficient for purposes of your MD&A discussion, nor do we believe that the fact that you have priced new products in way that has resulted in similar year over year margins justifies not presenting a discussion of cost of sales in MD&A since such costs are one of your most significant operating expenses. For a company with the size and breadth of operations as yours, costs should be discussed and analyzed in a way that allows your investors to properly evaluate your consolidated results of operations. As previously requested, please revise and expand your MD&A in future filings to separately quantify and discuss factors responsible for changes in the levels of the Company's cost of sales at the consolidated level during all periods presented in the Company's financial statements. Note that we will not object to your determination to not present this discussion at the segment level unless a change in cost of sales materially impacted the segment's gross margin. As previously requested, please revise to quantify

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and discuss the impact of each significant component of costs comprising cost of sales that caused cost of sales to materially vary (or not vary when expected to). In this regard, we believe materiality should be assessed in relation to both earnings from operations and earnings from continuing operations before income taxes. This disclosure should be presented in a manner so as to allow investors to discern the relative contribution of each of multiple components cited to the total change in cost of sales and resultant operating earnings. Please note that even when total amounts of costs of sales do not materially vary from period to period, the impacts of material variances in components of cost of sales that offset each other should be separately disclosed, quantified, and discussed (not netted).

You may contact Effie Simpson at (202) 551-3346, or in her absence, the undersigned at (202) 551-3750 if you have questions regarding comments on the financial statements and related matters. Please contact the undersigned with any other questions.

Sincerely,

/s/ Linda Cvrkel

Linda Cvrkel  
Branch Chief