



DIVISION OF
CORPORATION FINANCE

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

May 9, 2011

Via U.S. Mail and Facsimile

Anthony L. Trunzo
Chief Financial Officer
FLIR Systems, Inc.
27700 SW Parkway Avenue
Wilsonville, OR 97070

Re: FLIR Systems, Inc.
Form 10-K for the year ended December 31, 2010
Filed March 1, 2011
File No. 000-21918

Dear Mr. Trunzo:

We have reviewed your filings and have the following comments. Unless otherwise indicated, we think you should revise your document in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. 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.

Annual Report on Form 10-K for the year ended December 31, 2010

Item 1A. Risk Factors, page 22

1. In future filings, please remove the second and third sentences of the introductory paragraph. If a risk is not deemed material, it should not be referenced in the risk factors.

Dependence on sole source and limited source suppliers, page 25

2. We note that “[you] rely on sole or limited source third-party suppliers for . . . key components.” In future filings, please include a chart identifying the single source supplier for each of the components you identify on page 25 or tell us why this disclosure would not be material to investors.

Financial Statements, page 44

Notes to the Consolidated Financial Statements, page 50

Note 1. Nature of Business and Significant Accounting Policies, page 50

Revenue recognition, page 50

3. We note from page 18 that as a result of the acquisition of ICx, the company derives a portion of its revenue from US Government research projects ranging from several months to several years in duration. To the extent material, please tell us and revise future filings to disclose, the company’s revenue recognition policy with regards to such contracts.

Stock-based compensation, page 54

4. Please reconcile the cash received from the exercise of stock options of \$15.5 million, \$17 million and \$36.7 million for the years ended December 31, 2010, 2009, and 2008, respectively, to the \$21.5 million, \$22.3 million, and \$42.1 million as reported on the statement of cash flows.

Note 13. Contingencies, page 65

5. We note that the company is unable to estimate the amount or range of possible losses in both cases disclosed on page 65. Please tell us whether the plaintiffs in the Parrish case have specified the amount of damages they seek in their litigation. Your response should clearly address the reasons why the company is unable to estimate amounts or ranges given the circumstances of each case. We may have further comment upon receipt of your response.

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FLIR Systems, Inc.
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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Heather Clark at (202) 551-3624 or Jean Yu at (202) 551-3305 if you have questions regarding comments on the financial statements and related matters. Please contact Nolan McWilliams at (202) 551-3217 or Max A. Webb, Assistant Director, at (202) 551-3750 with any other questions.

Sincerely,

Linda Cvrkel
Branch Chief