

## SUPPORTING STATEMENT

### For Paperwork Reduction Act Submissions

#### **A. Justification.**

1. U.S. Military Academy (USMA) programs and curricula undergo periodic review for accreditation by the Accreditation Board for Engineering and Technology (ABET). As input to an upcoming review, perceptions of graduates about the effectiveness of their USMA education are required. Title 10, USC, Ch. 403, Sec. 4334 (Tab A), establishes the Superintendent as commanding officer, USMA. USMA Reg. 70-1 (Tab B) delegates responsibility from the Superintendent to the Director of Policy, Planning and Analysis for performing special institutional research projects such as program evaluations.
2. The information will be collected via eight surveys (Tab C), each covered by a memorandum from the Dean of the Academic Board urging participation in the survey, and each with content appropriate to graduates of engineering and engineering-related courses of study at USMA. The surveys will be administered by Institutional Research & Analysis, Office of Policy, Planning & Analysis, USMA. They will be used to evaluate programs and curricula and make changes deemed advisable.
3. The surveys will go to graduates currently serving as officers in the U.S. Army and those who have resigned their commissions and are now non-Department of the Army (non-DA) civilians. Those graduates are distributed throughout the world. The surveys will be distributed via the Internet. Each graduate will be provided with a unique user-id and password for access to the survey on a USMA webpage.
4. Similar information does not exist. The surveys request ratings by graduates of particular graduating classes on the effectiveness of USMA programs during the period of their attendance as preparation for their individual careers.
5. This collection of information does not impact small businesses or other small entities.
6. ABET accreditation occurs every six years. Since ABET considers graduate feedback and program change, where necessary, essential to program effectiveness, failure to conduct the proposed surveys prior to each review would prejudice USMA accreditation applications. In order that information identifying needed change be collected in timely fashion, graduates must be surveyed every three years.
7. Respondents will be asked to provide information within 30 days of receipt of questionnaires. This is customary response time for surveys.
8. A copy of notice published in the Federal Register (Vol. 72, No. 248, p. 73787-73788, dated December 28, 2007) is at Tab D. No public comments were received. Prior versions of these

surveys were pilot-tested with 28 graduates (active-duty officers) serving on the faculty at USMA. Respondents evaluated the clarity of the instructions and the clarity/appropriateness of the questions. Based on that input, revisions were made to the survey and an estimate of burden hours was derived.

9. No payment or gift will be provided to respondents.

10. Graduates will be instructed not to provide name, SSN, or other identifying information, and also that results will be reported solely as group data. All information collected will be stored in locked rooms or secured data files, with access restricted to authorized personnel only.

11. There are no questions of a sensitive nature in the surveys.

12. For purposes of this review, costs were calculated only for surveying former officers who are non-DA civilians.

a. The hour burden of information collection on the non-DA civilian portion of the sample will be:

|                     |                      |
|---------------------|----------------------|
| Respondents:        | 1421                 |
| Response time:      | .58 hr. <sup>1</sup> |
| Response frequency: | (one time)           |
| Burden hrs:         | 824                  |

b. The annualized cost burden for respondents will be \$28,963. Individual costs were calculated as burden hrs. (824) x average wage rate/hr. (\$35.15). Average wage rate/hr. was estimated from mean annual earnings for bachelor's degree recipients in engineering fields, four to seven years after graduation (Source: Engineering Workforce Commission – [www.ewc-online.org/data/salaries\\_data.asp](http://www.ewc-online.org/data/salaries_data.asp)).

13. There will be no additional cost burden to respondents.

14. Estimates of annualized costs to the Federal Government are as follows:

|                  |                      |
|------------------|----------------------|
| Personnel:       | \$9,120 <sup>2</sup> |
| Operating Costs: |                      |
| Equipment:       | (None)               |
| Overhead:        | \$1,824 <sup>3</sup> |
| Total:           | \$10,944             |

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<sup>1</sup> Individual burden was estimated from a prior collection. Depending on the extensiveness of optional comments provided, the hour burden for individuals could range from .25 hr. to one hour or more.

<sup>2</sup> Personnel time (240 professional hrs.) x avg. professional rate/hr. (\$38) = Govt. personnel costs.

<sup>3</sup> Overhead calculated at 20% of personnel costs.

15. This will be an extension of a currently approved collection of information.

16. The information collected will be analyzed and used to make changes deemed advisable to USMA engineering programs. Summary of graduate feedback and resultant program changes, if any, must be presented for review to an ABET accreditation team in September 2010 (exact date to be determined). The planned time schedule for the survey project follows:

| <u>Date</u>  | <u>Action</u>                          |
|--------------|--|
| Feb 2008     | OMB review process begins              |
| Jul 2008     | OMB approval                           |
| Oct 2009     | Survey distribution                    |
| Oct 2009     | Information collection begins          |
| Feb 2010     | Information collection ends            |
| Mar 2010     | Statistical analyses & evaluation      |
| Mar-Jun 2010 | Program review & change                |
| Sep 2010     | Status briefing delivered to ABET team |

17. Approval is not sought for avoiding display of the expiration date for OMB approval.

18. There will be no exceptions to the certification statement identified in Item 18, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-1.

**B. Collections of Information Employing Statistical Methods.**

1. Graduates of USMA Classes of 2002-2005 will be surveyed. Depending upon academic major, all graduates completed either engineering or engineer-related courses of study. Total numbers of graduates who are non-DA civilians to be surveyed are shown below.

| Classes of 2002-2005         |      |
|------------------------------|------|
| Population N                 | 2228 |
| Sample N                     | 2228 |
| Expected Return <sup>4</sup> | 1158 |

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<sup>4</sup> Response rate from a combination of paper and Internet surveys is expected to match the 52% rate obtained in 2007 distribution.

**2. Procedures for collection of information:**

**a.** Statistical methodology for stratification and sample selection: The survey sample encompasses the entire population of graduates from the studied classes who completed courses of study accredited by ABET (see B-2c & d for rationale).

**b.** Estimation procedure: All members of the population of interest will be surveyed.

**c.** Degree of accuracy: The selected sample encompasses the entire population of the studied classes. If the obtained response rate meets expectations (52%), data from the sample will show +/- 3% accuracy with a 95% confidence level. This will constitute sufficient accuracy to draw firm conclusions about the perceived quality of West Point engineering programs.

**d.** Unusual problems requiring specialized sampling procedures: The sample N reflects the nature of the evaluation – a review of the engineering component of the USMA program – and the desire to give every graduate of the engineering-oriented courses of study input to the evaluation.

**e.** Burden reduction: This information will be collected every three years, for reasons specified in A-6.

**3. Methods to maximize response rates:**

**a.** The response rate will be maximized by a cover message from the Dean of the Academic Board at USMA appealing for assistance of graduates in improving the Academy for future officers and the Nation, and a follow-up message urging timely response. Non-responders after 30 days then will receive a follow-up e-mail of a complete survey replacement package, followed by a second reminder message. These procedures should produce a response rate more than sufficient to yield reliable results (see B-2c).

**b.** No other method of increasing the response rate is feasible, since telephone numbers for calls to non-responders are not accessible.

**4.** The surveys were reviewed extensively by a committee at USMA preparing for ABET accreditation and by engineering department heads.

**5.** The survey administration plan was developed by Ms Janet Wolff, Institutional Research & Analysis, United States Military Academy. She will administer the survey and collect the results. Ms. Wolff's telephone numbers are commercial: (845) 938-7384/DSN 688-7384; her e-mail is janet.wolff@usma.edu.