

The Astronaut Office Chief and Deputy Chief, have concurred on the following response to the comments outlined in the “Actions” below. Appropriate changes have been made to the Supporting Statement and attached to this reply.

**1. *Is the proposed collection of information necessary for the proper performance of the functions of NASA, including whether the information collected has practical utility?***

- a. Collecting professional references is a critical component of NASA’s Astronaut Candidate (ASCAN) selection process because it provides the Selection Board with qualitative, experience-based insight into an applicant’s capabilities, character, teamwork, and leadership potential —factors that cannot be fully assessed through application materials or testing alone. NASA’s reference inquiries explicitly request candid evaluations from individuals who have directly worked with the applicant, ensuring the agency gains a comprehensive, real-world understanding of how the candidate performs in demanding, high-stakes environments. This information significantly assists NASA in determining each applicant’s overall suitability for the astronaut role and supports fair, informed decision-making during the selection process.

**2. *Is NASA’s estimate of the burden (including hours and cost) of the proposed collection of information accurate?***

- a. The PRA Supporting Statement was slightly inaccurate and has been updated to correct the discrepancies (see attached). As stated in the newly revised Supporting Statement, “...approximately 450 applicants are placed in the ‘highly qualified’ rating category. Only then is information obtained from external references identified by the applicant. Each applicant provides the ASO with a list of **at least five (5)** personal and professional references – two (2) key professional references (current and most recent previous supervisors) and three (3) additional personal (character) references, totaling **2,250 potential responses.**” The estimates of burden now reflect the following:

- i. The collection instrument was designed as a six (6)-step, “low-to-high” ranking survey that replaced the paper-based form (JSC Form 726). Each step in the survey includes between one (1) and nine (9) single-line qualitative statements and a free-form text area, which provides the references an opportunity to expound on the raking selections. Preliminary testing concluded that **no more than 20 minutes per reference respondent** was sufficient time to provide reference responses utilizing the collection instrument, assuming the additional elucidation inputs are pre-authored and subsequently transferred to the free-form fields.

We believe that the **hours burden estimate** is accurate, based on **20 minutes per response**. However, the actual number of burden hours reported in the Supporting Statement **is not** accurate when based on the potential number of all respondents:

1. The total number of possible respondents is **2,250** (450 applicants X 5 references per applicant)
  2. The average number of reference responses is approximately **75%**, so the estimated hours burden is **562.5**, or  $((2,250 \times 75\%) \times 20 \text{ minutes per response}) / 60 \text{ minutes per hour}$
  3. The hours burden estimate for responses by **ALL** references is **750**, or  $(2,250 \times 20 \text{ minutes per response}) / 60 \text{ minutes per hour}$
- ii. The previous **cost burden estimate** was based on the maximum cost of USPS postage at the time of candidate reference collection. may no longer be accurate. Additionally, there was some irrelevant data included, which has now been removed (see the attached Supporting Statement).

**NOTE:** It is understood that some candidate references may be located outside of the United States; the cost of international postage was not considered in estimating this burden.

1. The Supporting Statement submitted to the PRA Office this cycle estimated the cost burden of purchasing a pre-stamped USPS envelope (As of May 2023) at approximately \$0.63 (sixty-three cents), calculating the cost burden to be \$546.84 for an average of 868 reference responses submitted via the USPS/mail services during the two (2) month reference collection phase.
2. Currently, the cost of a single USPS pre-stamped envelope is \$0.95 (ninety-five cents). If all references respond to the inquiry, the cost burden estimate would be **\$2,137.50** (2,250 x 0.95). However, the actual number of reference responses for the most recent Astronaut Selection cycle was 1,745. Therefore, the cost burden eliminated this cycle was **\$1,657.75** (1,745 x 0.95).

**3. *Are there ways to enhance the quality, utility, and clarity of the information to be collected?***

- a. One of the eligibility requirements for applying to become a NASA Astronaut Candidate is the inclusion of at least five (5) professional references within the applicant's USAJOBS résumé. At least one of these references must be the applicant's current or most recent employment supervisor. In evaluating an applicant for the Astronaut Candidate Program, it is essential that NASA obtain qualitative, experience-based insight from the individual who has been directly responsible for overseeing the applicant's performance in the workplace. While additional references often consist of co-workers or personal acquaintances—whose perspectives, though valuable, may be inherently more favorable—supervisors are uniquely positioned to provide objective assessments of an applicant's professionalism,

reliability, judgment, and ability to perform under demanding conditions. For this reason, requiring two (2) or even three (3) supervisory references would meaningfully enhance the quality, utility, and clarity of the information collected, offering the Selection Board a broader, more balanced view of the applicant's performance history and strengthening NASA's confidence in determining overall suitability for astronaut service.

**4. *Are there ways to minimize the burden of the collection of information on respondents, including automated collection techniques or the use of other forms of information technology?***

- a. We believe this collection instrument currently meets the requirement of minimizing the burden of information collection. It was designed as a secure web-based form, a responsive online interface that enables mobile-accessible submission, automated data validation checks, and pre-determined context that simplifies the respondent experience and eliminates unnecessary manual entry or areas of expertise. These collection instrument features help reduce respondent workload while maintaining data quality and integrity.

However, this program might consider providing respondents with instructions on utilizing Artificial Intelligence (AI) to reduce their own unnecessary burdens associated with a PRA-covered information collection. Respondents' can streamline and accelerate the way they prepare and submit their responses. AI-enabled tools can assist respondents in organizing their thoughts, drafting narrative text, and generating clear, concise statements that accurately reflect their professional assessments, thereby reducing the time spent composing free-form input. Automated proofreading, formatting assistance, and content-structuring features help ensure clarity and completeness on the first submission, decreasing the likelihood of follow-up requests for clarification. Additionally, AI systems integrated into respondents' existing workflows—such as email, document editors, or knowledge-management environments—enable faster

retrieval of supporting information and more efficient transfer of pre-authored content into the collection instrument. When used responsibly, these capabilities support the PRA's intent by meaningfully lowering the effort required to participate while maintaining the quality and integrity of the information provided.