
INTRODUCTION. In summer 1991 the European Space Agency (ESA) performed its second selection campaign since 1977 in order to find 10 astronaut candidates (laboratory specialists and spaceplane specialists). An integral part of this selection process was the psychological evaluation according to the principals laid down in the study report "definition of Psychological Testing of Astronaut Candidates". METHODS. After national preselections, 59 applicants participated in the psychological evaluation which consists of the assessment of operational aptitudes (space cognitive and psychomotor functions) and personality traits (motivation, social capability, stress resistance). The test program included a diverse number of laboratory, questionnaires, behavioral ratings, biographical data, and semi-structured interviews. About 50 scores were available for each subject. RESULTS. A majority of the test scores with the original normative data, culture-fairness of the psychological selection, and discriminant functions analyzing the assessment decisions will be presented and discussed. CONCLUSIONS. Since the psychological evaluation was finished just before the deadline of the abstract, quantitative results and conclusions cannot be given in this abstract but will be reported in the conference paper.


NASDA has started the recruitment of Japanese Mission Specialist (MS) candidates who will join the NASA MS training course in 1992. Finally, two MS candidates will be selected. Our selection schedule is as follows:

1) Recruitment period: July 1 to August 31, 1991
2) Phase I selection: September, 1991
3) Phase 2 selection: November, 1991
4) Phase 3 selection: March or April, 1992

The battery was administered to one hundred three Astronaut Candidates and sixty-six current U.S. Shuttle Astronauts. To determine flight performance were defined. Astronauts rated their peers on these dimensions. RESULTS OF THE 1991 SELECTION CAMPAIGN. In addition to peer ratings, supervisor assessments of the same dimensions were obtained for each Astronaut. RESULTS. Cluster and factor analysis techniques were employed to analyze the data of the two subgroups of astronauts. Those astronauts with both high achievement needs and interpersonal skills were most often rated among the top five by their peers and least often rated among the last five of scales discriminated between Astronauts rated high and low on one or more performance dimensions. CONCLUSIONS. The results parallel findings from other studies of individuals in other demanding professions, including aircraft pilots and research scientists, suggesting that personality factors are significant determinants of performance in the space environment.