

April 12, 2004

Dear TPF-SWG,

I am writing to inform you of exciting new developments for TPF. As part of the President's new vision for NASA, the agency has been directed by the President to "***conduct advanced telescope searches for Earth-like planets and habitable environments around other stars.***" Dan Coulter, Mike Devirian, and I have been working with NASA Headquarters (Lia LaPiana, our program executive; Zlatan Tsvetanov, our program scientist; and Anne Kinney) to incorporate TPF into the new NASA vision. The result of these deliberations has resulted in the following plan for TPF:

1. Reduce the number of architectures under study from four to two: a) the moderate sized coronagraph, nominally the 4x6 m version now under study; and b) the formation flying interferometer presently being investigated with ESA. Studies of the other two options, the large, 10-12 m, coronagraph and the structurally connected interferometer, would be documented and brought to a rapid close.
2. Pursue an approach that would result in the launch of BOTH systems within the next 10-15 years. The primary reason for carrying out two missions is the power of observations at IR and visible wavelength regions to determine the properties of detected planets and to make a reliable and robust determination of habitability and the presence of life.
3. Carry out a modest-sized coronagraphic mission, TPF-C, to be launched around 2014, to be followed by a formation-flying interferometer, TPF-I, to be conducted jointly with ESA and launched by the end of decade (≤ 2020). This ordering of missions is, of course, subject to the readiness of critical technologies and availability of funding. But in the estimation of NASA HQ and the project, the science, the technology, the political will, and the budgetary resources are in place to support this plan.
4. Prepare for a review of these plans for TPF by the Committee for Astronomy and Astrophysics (CAA) over the summer.
5. In response to a statement by the Origins Subcommittee, plan to compete the Science Center(s) for TPF-C and TPF-I at the appropriate time in the project life-cycles.

The opportunity to move TPF forward as part of the new NASA vision has called for these rapid and dramatic actions. What has made these steps possible has been the hard work by the entire team, including the TPF-SWG, the two "TPF architecture teams", and all the technologists at JPL and around the country, which has demonstrated that NASA is ready to proceed with both TPF-C and TPF-I and that the data from these two missions are critical to the success of the goals of TPF. We will be making more information available as soon as additional details become available. Thank you for all your help in preparing TPF to take advantage of this opportunity.

Sincerely yours,

Dr. Charles Beichman
TPF Project Scientist