# **NASA Advisory Council Recommendation**

# Workforce Skill Mix 2012-02-02 (CSC-01)

#### Recommendation:

The Council recommends that as NASA evolves its workforce skill mix and human capital planning to accommodate the Agency's future direction in the post Space Shuttle era, the unique skills needed for effectively overseeing commercialization initiatives should be considered and secured.

#### Major Reasons for the Recommendation:

Clearly, NASA will need many of the same skills that flew Space Shuttle safely to manage their commercial launch providers and ensure commercial crew transportation safety. However, overseeing commercialization initiatives also requires skills and experience in areas such as business development, business analysis, and business operations, which do not appear to be currently available in great depth in the Agency. NASA should address this gap through training, recruitment, and/or other personnel actions.

# Consequences of No Action on the Recommendation:

The Agency's workforce will continue to lack the depth in some critical skills and experience needed to effectively oversee commercial space initiatives.

### **NASA Response:**

NASA agrees with the intent of the Committee's recommendation but does not agree there is a lack of depth in the skills and expertise needed for effectively overseeing commercialization initiatives. As the Committee pointed out, the employees now assigned to the Commercial Programs have brought with them many of the skills required to manage and operate the Space Shuttle. As part of the transition of employees from Shuttle program to NASA's Commercial and other Human Space Flight programs, the Agency continues to address developmental needs on an on-going basis – for example through specialized training and development (internal and external classes and programs) – as employees build their capability to support new programs. For example, curricula of development programs offered to NASA employees include topics relevant to commercialization – programs such as the Business Education Program, International Project Management course, and International Space University Space Studies Program. NASA also provides access to more than 30 online courses on subjects such as business analysis, business execution, commercial environment, and business operations.

In addition to skill development and enhancement for current employees, the Agency, Centers, and Commercial Program have a number of tools available to address skill gaps as they are identified or emerge. Civil service capability will continue to be enhanced through targeted hiring that is responsive to Program requirements. It is possible to acquire expertise externally

through the use of external experts and consultants, Intergovernmental Personnel Agreements, and temporary appointments. The Agency can draw upon this external expertise on an as needed basis to meet Program requirements and/or it can be used to infuse new skills into the permanent NASA workforce. As our understanding of the skills requirements matures, we will work with the Program and Centers' Human Resources Offices to identify skills imbalances and additional tools needed to address them.