

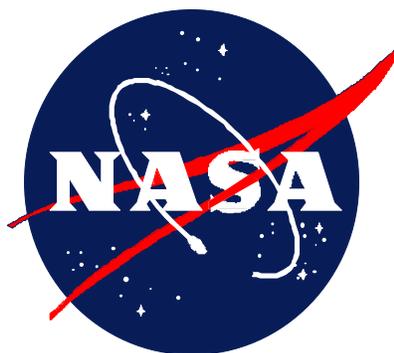
Office Work Instruction

HOWI 7120-Y003A

Effective Date: April 28, 1999

Responsible Office: YF/Program Planning and Development Division

Subject: Formulate and Approve Flight Missions



OFFICE WORK INSTRUCTION

**FORMULATE AND APPROVE FLIGHT
MISSIONS**

(Conforming to ISO 9001 Quality System Requirements)

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DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		2/1/99	
Revision	A	4/28/99	<p>Sections 1.0 and 6.0: Changed to lower case for program coordinator as this is a role or function, not a title. Changed to lower case for division director, except where referring to a specific division director, per NHB 1450.1B, <i>NASA Correspondence Standards</i>.</p> <p>Section 2.0: Expanded scope to include technology demonstration flight mission requirements. Introduce notion of tailoring the 2-step process.</p> <p>Section 4.0: Deleted references not called out in the procedure.</p> <p>Section 5.0: Added a flight mission formulation planning activity. Added <i>Technology Development/Investment Plan</i> as an input to activity # 2. Added references to HOWI 7040-Y012 and HOWI 5100-Y014. Deleted references to HOWI 5100-Y013. Removed "Solicitation Requirements" as an output of activity # 4. Added a note explaining that activity # 9 is skipped if a 1-step process is used. Clarified the titles of outputs from activities # 8 and 10. Shaded PMC owned activities (13 and 14). Revised activity titles to be consistent with Section 6.0.</p> <p>Section 6.0: Clarified that the two step selection process can be tailored to a one step process if desired. Removed reference to HOWI 5000-Y013. Removed Solicitation Requirements as an explicit output of activity # 4. Clarified the use of the phrase "flight mission profile." Clarified evaluation requirements for comparing flight mission architectures in activity # 5. Revised step one of the two step solicitation process to result in an "Advisory Downselect." Indicated that activity # 9 can be skipped if a one step selection process is used. Updated references to HOWI 8310-Y005, HOWI 7040-Y012, and HOWI 5100-Y014.</p> <p>Section 7.0: Added NPG 1441.1 reference. Updated owner and retention information. Modified location and retention for Accept/Reject letters. Changed mappings from NPG Schedule 5, "Industry Relations and Procurement," to NPG Schedule 7, "Program Formulation Records."</p>

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PREFACE

The NASA Office Work Instruction (OWI) for Formulate and Approve Flight Missions documents the tasks and activities in conformance with the International Organization for Standardization's (ISO) 9001 requirements for quality systems. The OWI supplements the *NASA Strategic Plan*, the *NASA Strategic Management Handbook*, and other higher level NASA directives, which form the basis for how NASA conducts business.

This OWI is not intended to duplicate or contradict any other NASA policy, procedures or guidelines, which currently exist. As such, the OWI will reference prevailing documents where a topic is addressed and existing coverage is deemed adequate. Additional information provided within is intended to supplement existing documentation regarding Headquarters (HQ) implementation of strategic and program/project management, as well as HQ conformance with the ISO 9001 Quality Management System (QMS) requirements.

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1.0 PURPOSE

This OWI provides instructions on what must be done to formulate NASA Earth Science Enterprise (ESE) flight missions. It describes the activities that are performed for a typical mission formulation effort. The OWI describes what is to be accomplished by the process, not how the work is to be performed. Program coordinators are expected to apply their experience, expertise, professional contacts, and knowledge in order to successfully conceptualize, solicit, and plan science and applications-driven flight missions.

2.0 SCOPE AND APPLICABILITY

2.1 Scope. This work instruction describes activities typically performed by a team of Enterprise and Agency personnel coordinated by the Program Planning and Development Division of the NASA ESE when formulating science, applications, and technology demonstration-driven flight missions. Flight mission formulation begins with the packaging of Earth science, applications, and/or technology demonstration requirements into sets. These requirements sets form the basis for conceptualizing a flight mission, and developing its architecture. A 2-step solicitation approach is then followed which results in a "preferred" response. Level I program requirements are developed, a new or updated Program Commitment Agreement (PCA) is produced, and a lead center assigned. The process is completed when the ESE Associate Administrator (AA) and NASA Administrator sign the PCA.

This work instruction represents a tailoring of NPG 7120.5, *NASA Program and Project Management Processes and Requirements*, to support a process that is modeled after the Earth System Science Pathfinder (ESSP) method of formulating a flight mission. Fundamentally, this approach reaches out to the science community for ideas on how best to meet the science and/or applications requirements and involves a 2-step solicitation process. The process is tailorable depending on the specific circumstances. In particular, if the mission is straight forward and well defined, or the need is sufficiently urgent, a 1-step process may be employed that by-passes the advisory downselection step (Activity 9).

2.2 Applicability. This work instruction for Formulate and Approve Flight Missions applies to the NASA Office of Earth Science (OES, Code Y) offices and divisions. The Associate Administrator for Earth Science is responsible for maintaining this document. The controlled version of this OWI is available on the World Wide Web (WWW) via the HQ ISO 9000 Document Library at <http://hqiso9000.hq.nasa.gov>. Any printed version of this OWI is uncontrolled (reference: HCP 1400.1, *Document and Data Control*). Proposed revisions will be accomplished by following HOWI 1410-Y015, *Approve Quality Documents*.

3.0 DEFINITIONS

Appendix B of the *Earth Science Enterprise Management Handbook* provides ESE-specific terms and definitions.

4.0 REFERENCES

The following documents contain provisions that, through reference in this OWI or in policy or procedure documents, constitute the basis for the documented procedure:

NFS Part 1835	NASA FAR Supplement, Part 1835, Research and Development Contracting
NFS Part 1872	NASA FAR Supplement, Part 1872, Acquisition of Investigations

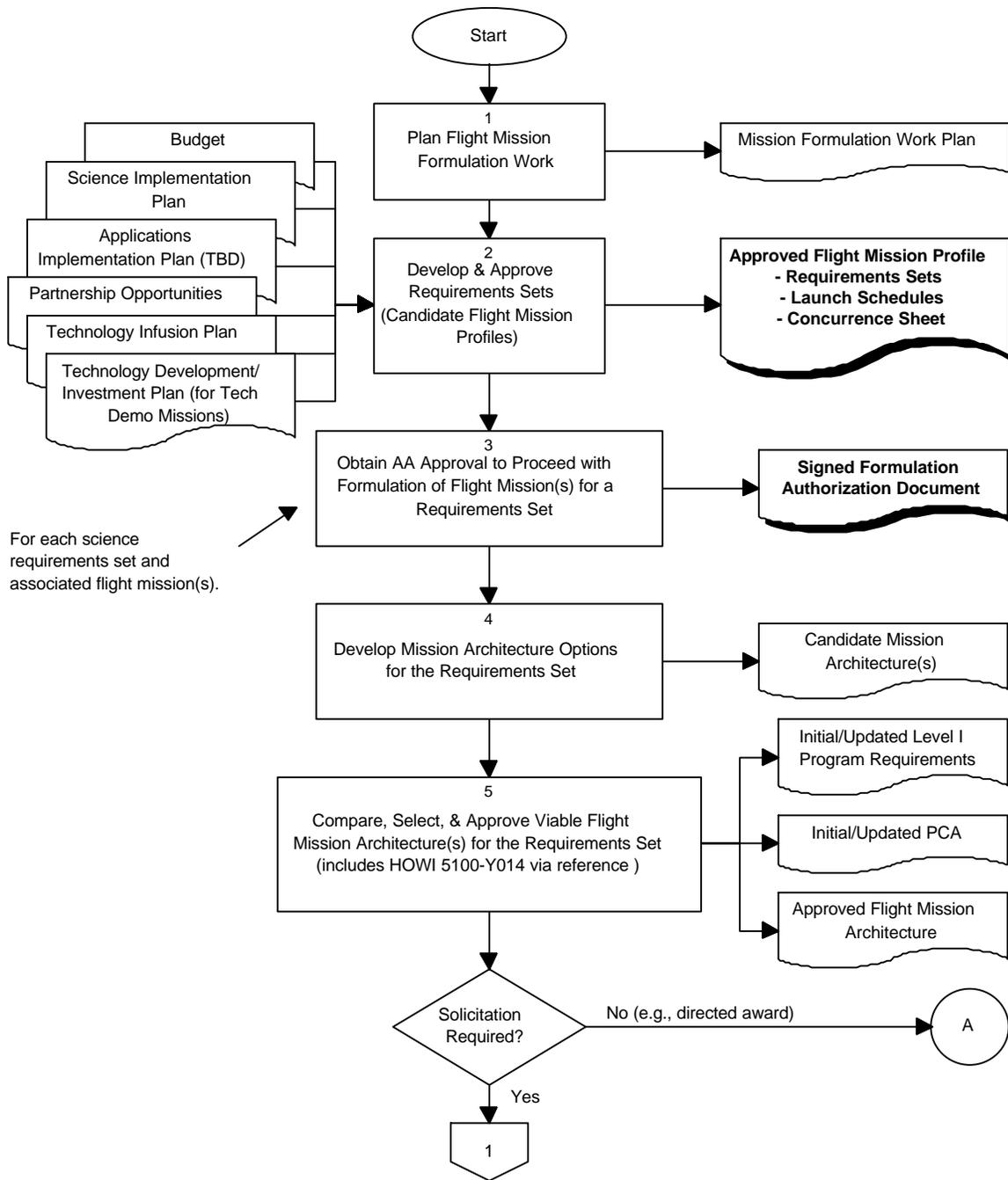
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NPG 7120.5	NASA Program and Project Management Processes and Requirements
HOWI 8310-Y005	Solicit and Select Science, Applications, Education, and Technology Investigations
HOWI 7040-Y012	Conduct Peer Review
HOWI 5100-Y014	Obtain Approval for Release of Solicitation Instrument

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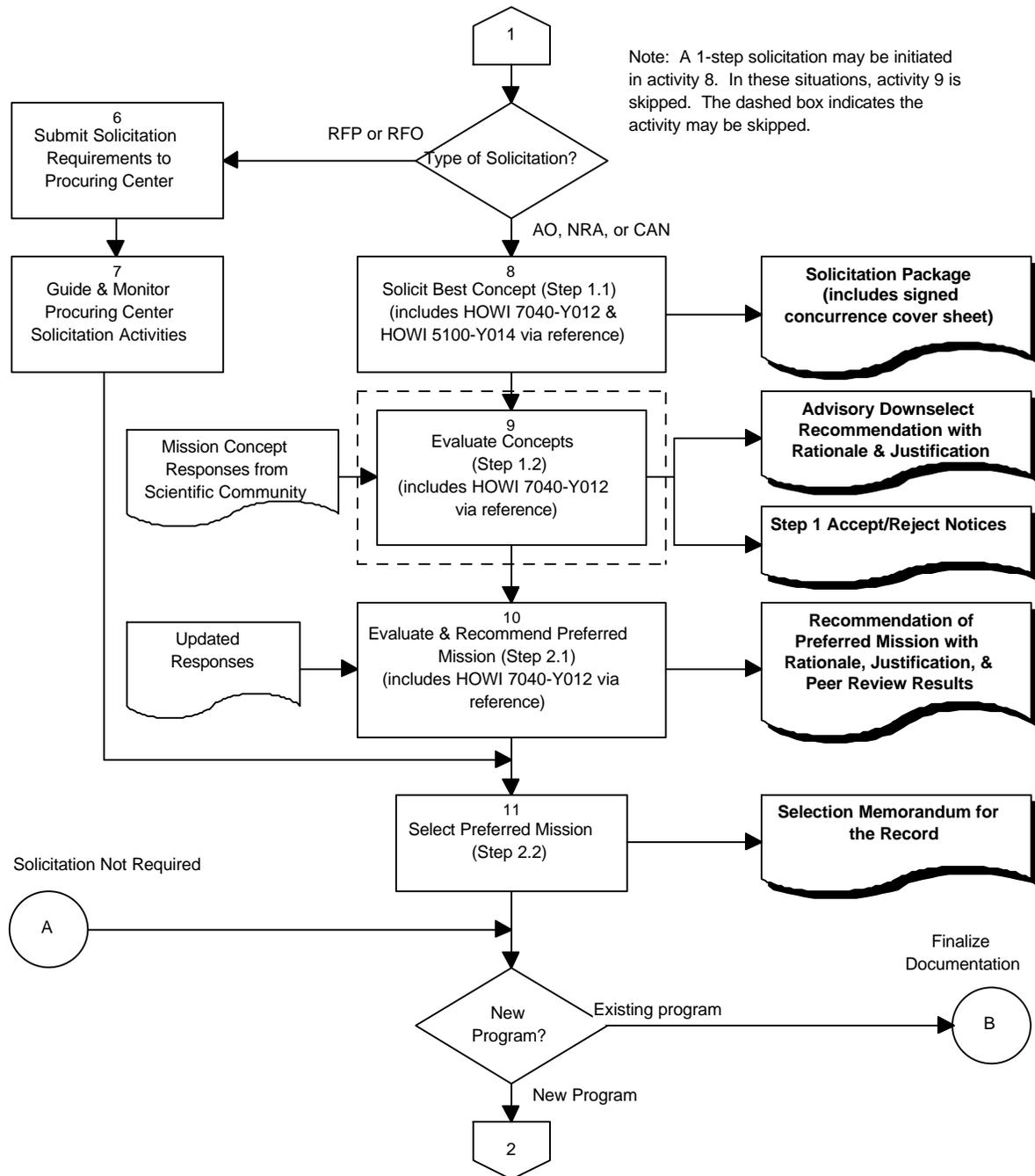
5.0 FLOWCHART

The following flowchart depicts the procedure described in Section 6. Outputs in boldface type represent the quality records listed in Section 7. Shaded objects belong to entities other than ESE.



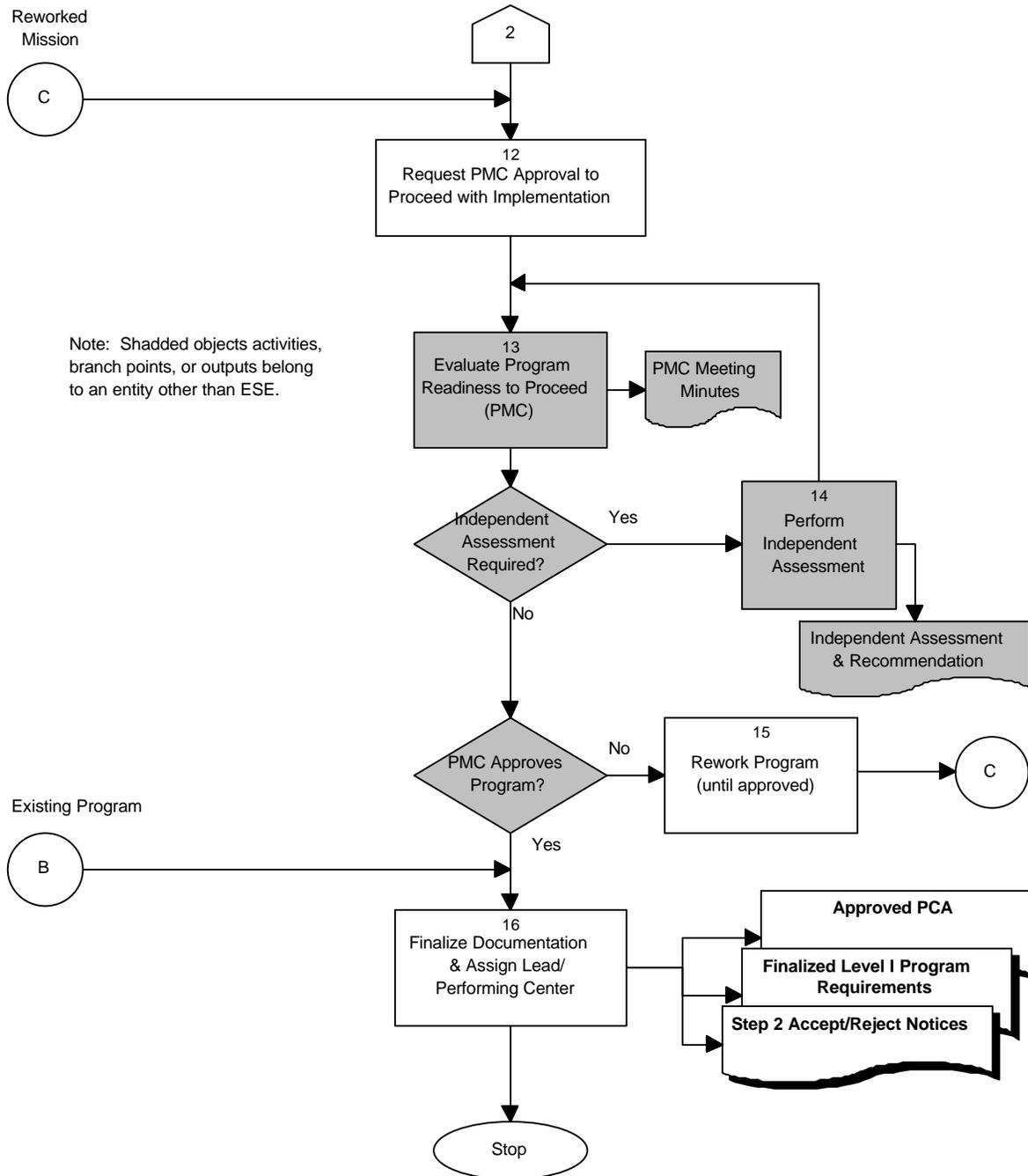
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5.0 FLOWCHART (CONTINUED)



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5.0 FLOWCHART (CONTINUED)



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6.0 PROCEDURE

The following table describes the flowchart of Section 5.

<u>Actionee</u>		<u>Action</u>
YF Division Director	1	<p><u>Plan Flight Mission Formulation Work</u>. The ESE Program Planning and Development Division (YF) Director is responsible for planning the work to be done in formulating a flight mission. The YF Division Director plans the activities required to execute this procedure in advance. The work plan documents the required work activities, resources, milestones, and schedule. This planning activity consists of the following steps:</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>Identify Required Work Activities</i>. Extract work activities from this procedure documentation and tailor them to the specific needs of the task at hand. Tailor the activities by identifying the necessary resources and milestones. <input type="checkbox"/> <i>Obtain Resources</i>. Involve all affected groups in identifying the resources needed to execute the work, the associated costs, and the work schedule. Make a preliminary determination as to the desired makeup of the mission development team. <input type="checkbox"/> <i>Establish the Schedule</i>. Include the required resources, milestones, and work schedule in the work plan. <p>The plan is updated as part of Activity 3 when the draft Formulation Authorization Document is developed.</p>
Division Directors coordinated by YF	2	<p><u>Develop and Approve Requirements Sets (Candidate Flight Mission Profiles)</u>. Science, applications, and technology demonstration requirements -- documented in the <i>ESE Science Implementation Plan</i>, the Applications implementation Plan, and the Technology Development/Investment Plan -- drive formulation of flight programs. Packaging related requirements into sets for flight is tempered by the science and applications requirements, technology schedules published in the <i>Technology Infusion Plan</i> (produced by the Manage ESE Technology Development Program process), and budgets. In essence, the flight mission profile represents a synchronization of requirements sets with technology schedules and budget availability.</p> <p>The division directors prepare a briefing of the flight mission profiles which is given to the ESE AA. The ESE AA determines the acceptability of the flight mission profiles and approves them for inclusion in a flight program by signing a concurrence cover sheet. The ESE AA relies heavily on advice from the division directors when making these decisions. Note that a program is a collection of related flight mission(s) that in turn address specific requirements sets.</p>
Development Team (YF, YS, YO, YB, IY, H, and G)	3	<p><u>Obtain AA Approval to Proceed with Formulation of Flight Mission(s) for a Requirements Set</u>. For each flight mission profile approved during the previous activity (Activity 1), the Directors of ESE assign a development team. As a minimum, the development team includes a Program Scientist from the Research Division (YS) and/or an Application and Outreach Executive from the Applications Research and Outreach</p>

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Division (YO), the program coordinator from the Program Planning and Development Division (YF), the Business Division (YB), an International Affairs specialist from Code IY, a procurement specialist from Code H, and legal council from Code G.

The team begins to define the concept for the mission(s). As part of this effort, the development team associates mission(s) to a specific ESE program/project. **In some cases, new missions are attached to an existing program. In other cases, new missions (one or more) may become a new program.**

The team also begins to define the purpose and objectives of the mission(s), relate the objectives of the mission(s) to the ESE goals, prepare overviews for the mission(s), define who are the customers for the mission(s), and specify who has responsibility and authority for the mission(s). All of this is preparatory work for later development or update of the associated program's Program Commitment Agreement (PCA).

The team tailors the NASA program management process defined in NPG 7120.5, *NASA Program and Project Management Processes and Requirements*, to meet the unique needs of the mission(s) being formulated. This tailoring is incorporated into the program's PCA later in the formulation process.

The team continues the conceptualization activity by scoping out the rest of the mission formulation phase, identifying program time and cost constraints, and estimating the funding requirements for the mission formulation phase. The team also identifies other enterprises, centers, and external partners who will participate in the program.

The tasks contained within this activity lead to the development of a draft Formulation Authorization Document for the proposed mission. Refer to NPG 7120.5 for a listing of what should be included in a Formulation Authorization Document. The Formulation Authorization Document documents the development team's replanning of the formulation effort.

The development team presents the draft Formulation Authorization Document to the ESE AA who determines whether or not to proceed with additional mission formulation efforts. If authorization to proceed is denied, the mission concept is either reworked based on guidance received from the ESE AA or planning ceases. The ESE AA indicates approval to proceed by signing the Formulation Authorization Document. This authorizes the team to continue the formulation effort and expend the formulation resources identified in the Formulation Authorization Document.

Development Team 4 Develop Mission Architecture Options for the Requirements Set. With the signed Formulation Authorization Document as authorization to proceed, the development team conducts a series of tasks designed to develop candidate mission architectures which represent mission implementation options. One of the mission architectures will become the desired mission architecture documented in the PCA and defined by the NASA HQ Level I program requirements for that mission (see Activity 5).

The team or its designee begins the activity of developing candidate

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mission architectures by identifying or assessing the following: partnership opportunities, technology readiness schedules, commercialization opportunities, data system needs and issues, environmental issues, and life-cycle cost (LCC) elements (specific cost estimates are developed later in Activity 5). This information, together with the requirements sets, the flight mission profiles, and the *Technology Infusion Plan*, enable the team to develop Level I program requirements for the mission later in Activity 5.

The team then identifies risks and defines appropriate acquisition strategy options for each candidate mission architecture. The acquisition strategy would indicate if the solicitation was to be a Request for Proposals (RFP), Request for Offer (RFO), a NASA Research Announcement (NRA), an Announcement of Opportunity (AO), or a Cooperative Agreement Notice (CAN). If the solicitation were to be an RFP, then the award instrument would be a contract. The award instruments for an NRA can be a cooperative agreement, grant, or contract. For an AO, the award instrument can be a grant or a contract.

As members of the development team, the Code H (Office of Procurement) and Code G (Office of the General Counsel) representatives assist in defining acquisition strategies for each of the options. The other members of the development team rely on the Code H and Code G representatives' knowledge of procurement laws and regulations to ensure appropriate acquisition strategies are selected. Refer to Appendix A in HOWI 8310-Y005, *Solicit and Select Science, Applications, Education, and Technology Investigations*, for reference information on selecting an appropriate solicitation instrument.

Development Team 5
ESE AA

Compare, Select, and Approve Viable Flight Mission Architecture(s) for the Requirements Set. The development team then evaluates and compares the various candidate mission architectures using the information generated in the previous activity. As part of the evaluation, the team develops life-cycle cost estimates for each architecture. These architectures and cost estimates are often developed using mission design capabilities located at NASA centers. These cost estimates are used in the comparison among candidate architectures. The evaluation and comparison considers issues such as: 1) how well the science requirements are met, 2) whether the architecture fits within the available budget, and 3) satisfaction of the mission profile schedule. The comparison results in recommended mission architecture(s) that are presented to the ESE AA by the program coordinator.

If the ESE AA approves the mission architecture(s), the development team updates existing or prepares new Level I documentation (PCA, requirements, etc.) for that mission. Should the ESE AA reject the proposed mission architecture, the activity cycles back to the step where the development team formulates candidate mission architectures and repeats the intervening steps.

Refer to NPG 7120.5 for listings of what should be included in a PCA. The Level I program requirements for the mission represent the core NASA HQ requirements. These requirements will be used in the Oversee

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and Evaluate Flight Program process to determine if the Lead or Performing Center is successful in accomplishing the mission. At a minimum, these Level I requirements include the mission objectives, the PCA technical performance requirements, the mission schedule, and the total life cycle cost.

If the acquisition strategy articulated in the approved mission architecture requires a solicitation, then the process proceeds to either Activity 6 (Submit Solicitation Requirements to Procuring Center) or Activity 8 (Solicit Best Concept). The path is through Activity 6, if the solicitation is to be done via an RFP or RFO. For Announcement of Opportunity (AO); NASA Research Announcement (NRA); and Cooperative Agreement Notification based solicitations, the process flow is through Activity 8. If no solicitation is required and the mission(s) represent a new Program, the process skips to Activity 12 (Request PMC Approval to Proceed with Implementation). An example of such a skip might occur in the case of a directed award.

The development team determines how to tailor the solicitation process at this point. In particular, they determine if a full 2-step process is to be used or a 1-step process. For example, selection of a full-blown science or applications mission may require the full 2-step process. In contrast, the mission for a single instrument or measurement capability may be defined well enough or the need sufficiently urgent that a 1-step approach is appropriate. This decision is made on a case-by-case basis.

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| Development Team | 6 | <u>Submit Solicitation Requirements to Procuring Center.</u> For RFP or RFO-based solicitations, the development team relies on a NASA center to write and issue the RFP/RFO, as well as evaluating responses from offerors. The development team provides the NASA center with solicitation requirements in the form of mission requirements, a solicitation schedule, and solicitation funding constraints. ESE normally retains responsibility for making the actual selection, however (see Activity 11). |
| Development Team | 7 | <u>Guide and Monitor Procuring Center Solicitation Activities.</u> The development team monitors the NASA center's solicitation process to ensure the solicitation schedule and cost constraints are being honored. Where appropriate and needed, the development team also provides guidance to the NASA center. |
| Development Team | 8 | <u>Solicit Best Concept (Step 1.1).</u> For NRAs, AOs, and CANs, ESE retains responsibility for generating the solicitation, releasing it, and evaluating responses. This work instruction describes a 2-step solicitation approach (Activities 8 through 11). The philosophy behind this 2-step approach is to lessen the resource burden on proposing institutions by relying on the scientific and technology communities to develop, assess, and propose technological solutions to mission requirements without preparing full cost proposals, and then obtaining comprehensive proposals (including cost) from a reduced set of offerors screened by science and technology peer review teams. |

Depending on the circumstances and mission architecture option, the development team may tailor the solicitation and evaluation steps. This

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can include a tailored 2-step process or a tailored 1-step process.

Using the initial PCA, initial Level I program requirements for the mission, and other information developed in the previous activities as start points, the development team begins to prepare a solicitation that asks the science and technology communities for approaches that satisfy the mission's program requirements. The remainder of this work instruction describes the full two-step solicitation approach.

In the first step, the development team solicits ideas from the broader scientific and technical communities on how best to meet the mission's goals, objectives, and requirements. When soliciting concepts, the development team begins by defining proposal assessment criteria. Generally, the evaluation criteria includes the following: (1) the scientific and technical merit of the proposal, (2) the relevance of the proposal to the program/project's stated objectives and requirements, (3) the competence and experience of the offeror, (4) the realism of the proposal, (5) the proposed cost, and (6) the management approach proposed.

This solicitation also provides instructions for offerors who elect to proceed to step 2. When preparing updated responses to be considered in the final evaluation (see Activity 10), offerors will refer to these instructions.

The development team also merges technology criteria that it deems necessary for a successful mission with the proposal assessment criteria to form the required step 1 solicitation documents. Approval to release the solicitation is done in accordance with HOWI 5100-Y014, *Obtain Approval for Release of Solicitation Instrument*. If the ESE AA requests changes, the development team makes the changes.

At roughly the same time, the team selects a peer review panel that will evaluate responses (Activity 9). The peer reviewers normally are recognized experts. They may be from NASA, other Government agencies, universities, or the commercial sector. When selecting peer reviewers, the program coordinator is responsible for ensuring conflicts of interest are avoided. Refer to HOWI 7040-Y012, *Conduct Peer Review*, for details on selection of peer reviewers.

The ESE AA is designated as the selection official. The development team publicizes and releases the best concept solicitation in accordance with the Federal Acquisition Regulations (FAR) and the NASA FAR Supplements. A synopsis of the solicitation in the Commerce Business Daily (CBD) and on the NASA Acquisition Internet Service (NAIS). Again, refer to HOWI 5100-Y014 for instructions on how to release solicitations.

Development Team and Peer Reviewers 9

Evaluate Concepts (Step 1.2). Offerors from the scientific and technical communities generate proposals. These are intended to be brief proposals that outline how the offerors would meet the mission requirements. These responses are received by the peer review panel who screens the proposals for relevancy and feasibility.

The peer review panel discusses the scope, strengths, and weaknesses of the various proposals. The proposals are graded in accordance with the evaluation criteria defined in the solicitation and a consensus is sought

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from the committee. The results of the peer review panel's evaluation are documented and presented to the ESE AA as an advisory downselect¹ recommendation that includes identification of each proposal's strengths and weaknesses with rationale and justifications for the panel's recommendation. The ESE AA then makes an advisory downselect to a set of preferred responses. Refer to HOWI 7040-Y012 for details on peer review evaluations.

The successful offerors and those offerors whose proposals were not included in the advisory downselect are notified via formal letter signed by the AA.

Development Team and Peer Reviewers 10

Evaluate and Recommend Preferred Mission (Step 2.1). The offerors submit updated responses that contain more detail and are more comprehensive including full cost information. They contain the results of mission trade-off studies, environmental assessments, platform and launch services availability assessments, assessments of ground data service options, and data availability assessments. The proposals also indicate what technology will be incorporated and the readiness of the technology. Tentative launch and partnership agreements will be documented. The proposals are expected to include estimated mission life-cycle costs as well.

The development team distributes the expanded responses to the peer review panel. As before, the peer review panel chair summarizes the responses for presentation at a meeting of the combined peer review panel.

The Panel Chair, a member of the development team, reconvenes the peer review panel to discuss the proposal evaluations. The peer review panel discusses the scope, strengths, and weaknesses of the various proposals. The proposals are graded in accordance with the evaluation criteria and a consensus is sought from the committee. The Panel Chair documents the results of the peer review panel's evaluation for presentation to the ESE AA. Again, refer to HOWI 7040-Y012 for details on peer review evaluations.

ESE AA Program Coordinator 11

Select Preferred Mission (Step 2.2): Evaluation results from the peer review panel or the procuring NASA center, depending on which solicitation path was pursued, are presented to the AA as strengths and weaknesses for each proposal with rationale and justification. The ESE AA selects the preferred mission profile. The program coordinator prepares and keeps a memorandum for the record documenting the ESE AA's decision.

If the new mission is an addition to an existing program, the flow proceeds to the Activity 16 (Finalize Documentation and Assign Lead/Performing Center). In the event, the mission results in a new program, then the flow goes to Activity 12 (Request PMC Approval to Proceed with

¹ An advisory downselect does not preclude an offeror from bidding during the second step of the process. However, it is an indication that NASA did not feel the concept presented in the initial offer was likely to be funded in the final selection.

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Implementation) and a set of evaluation activities by the PMC.

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| Program Coordinator | 12 | <p><u>Request PMC Approval to Proceed with Implementation.</u> The program coordinator prepares Program documentation and reports for submission to the Program Management Council (PMC) for approval to proceed. This applies to new programs only. If the mission is not a new program, the process skips to Activity 16 (Finalize Documentation and Assign Lead/Performing Center).</p> |
| PMC | 13 | <p><u>Evaluate Program Readiness to Proceed (PMC).</u> The PMC assesses the documentation provided by the Enterprise and determines if the program is consistent with Agency strategic goals and risk parameters. If risks are high, an independent assessment may be required. Based on this information, the PMC approves implementation of the Program as proposed or provides guidance.</p> <p>If either an independent assessment or other guidance is required, the PMC may re-evaluate the program's readiness for implementation after completion of those activities.</p> |
| Independent Assessment Program Office (IAPO) | 14 | <p><u>Perform Independent Assessment.</u> The independent assessment essentially is a readiness assessment used by the NASA HQ PMC when deciding whether to grant approval to proceed with implementation. The Independent Assessment Program Office (IAPO) typically prepares a presentation for the PMC that identifies the members of the assessment team, provides an executive summary, describes the Program, and discusses readiness, technical, and resource status and issues. Upon completion of the independent assessment, the IAPO forwards the various evaluation and assessment results to the NASA HQ PMC (see Activity 13).</p> |
| Development Team | 15 | <p><u>Rework Program (until approved).</u> The development team revises the Program as directed by the NASA HQ PMC. The program coordinator then again requests PMC approval to proceed (Activity 12). This cycle repeats until an acceptable Program is formulated.</p> |
| Development Team | 16 | <p><u>Finalize Documentation and Assign Lead/Performing Center.</u> The ESE AA assigns a lead or performing Center and the development team finalizes the Level I program requirements for the mission. The development team also completes the update to the PCA (a mission specific appendix) and submits the PCA to the ESE AA for approval and signature. After the ESE AA signs the PCA, the AA discusses the PCA with the NASA Administrator. If the Administrator signs the PCA, a letter from the ESE AA is prepared and sent to the lead or performing Center Director. This letter, along with the Level I program requirements for the mission, funding authorization (via Form 506 Green -- see HOWI 7410-Y008, <i>Execute the ESE Budget</i>), and the signed PCA, authorizes the lead or performing Center to implement the flight mission. The lead or performing Center is given authorization to administer the contract.</p> <p>Additionally, the development team notifies the step 2 offerors as to which offer was chosen. The selection decision is then announced in the CBD and NAIS in accordance with the requirements of the FAR and NFS.</p> |

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7.0 QUALITY RECORDS

RECORD IDENTIFICATION	OWNER	LOCATION	MEDIA Electronic or Hardcopy	SCHEDULE AND ITEM NUMBERS*	RETENTION / DISPOSITION
Approved Flight Mission Profile	YF Division Director	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 6, "R&D Program Manager Control Files."	Permanent. Retire to Federal Records Center (FRC) 2 years after completion, cancellation, termination, or suspension of the program. Transfer to National Archives and Records Administration (NARA) 10 years after subject event or when 25 years old whichever is sooner.
Signed Formulation Authorization Document	Development Team	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 6, "R&D Program Manager Control Files."	Permanent. Retire to FRC 2 years after completion, cancellation, termination, or suspension of the program. Transfer to NARA 10 years after subject event or when 25 years old whichever is sooner.
Solicitation Package (Includes Signed Concurrence Cover Sheet) (See HOWI 5100-Y014, <i>Obtain Approval for Release of Solicitation Instrument</i>).	Research Opportunity Administrator	Kept by Research Opportunity Administrator	Hardcopy	Schedule 7, Item 8, "NASA Research Announcement."	Transfer all files to the responsible division / project 2 years after award. Records will be incorporated into the official project file, or grant/contract file.
Advisory Downselect Recommendation with Rationale and Justification	Development Team	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 9, "R&D Peer Review and Evaluations," paragraph B.2.	Retire to FRC when 1 year old. Destroy when 5 years old.
Step 1 Accept/Reject Notices	Development Team	Support Contractor**	Hardcopy	Schedule 7, Item 9, paragraph B.2.	Retire to FRC when 1 year old. Destroy when 5 years old.
Recommendation of Preferred Mission with Rationale, Justification, and Peer Review Results	Development Team	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 9, paragraph B.2.	Retire to FRC when 1 year old. Destroy when 5 years old.
Selection Memorandum for the Record	Program Coordinator	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 9, paragraph B.2.	Retire to FRC when 1 year old. Destroy when 5 years old.

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RECORD IDENTIFICATION	OWNER	LOCATION	MEDIA Electronic or Hardcopy	SCHEDULE AND ITEM NUMBERS*	RETENTION / DISPOSITION
Approved PCA	Program Coordinator	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 6, "R&D Program Manager Control Files."	Permanent. Retire to FRC 2 years after completion, cancellation, termination, or suspension of the program. Transfer to NARA 10 years after subject event or when 25 years old whichever is sooner.
Finalized Level I Program Requirements	Development Team	Program Planning and Development Division (YF)	Hardcopy	Schedule 7, Item 6, "R&D Program Manager Control Files."	Permanent. Retire to FRC 2 years after completion, cancellation, termination, or suspension of the program. Transfer to NARA 10 years after subject event or when 25 years old whichever is sooner.
Step 2 Accept/Reject Notices	Development Team	Support Contractor**	Hardcopy	Schedule 7, Item 9, "R&D Peer Review and Evaluations," paragraph B.2.	Retire to FRC when 1 year old. Destroy when 5 years old.

* Quality Records are retained in accordance with the referenced schedule and item numbers from NPG 1441.1, *NASA Records Retention Schedules*.

** Jorge Scientific Corporation stores peer review results (including accept/reject letters) at 400 Virginia Avenue SW, Washington, D.C., telephone 202/554-2775. These records are available for on-site inspection in Jorge offices during normal working hours. For off-site use, copies must be requested.

- For on-site inspection, the solicitation initiator may call in advance to request record retrieval and work space in the Jorge offices. Specify the solicitation name or acronym, the solicitation number, and the type of document required -- for example, accept/reject letters, mail evaluation forms, panel evaluation forms, summary reports.
- To request copies for use outside Jorge offices, the solicitation initiator may contact either the support contractor's Code Y Project Manager, or the Task Lead who was assigned to support a particular peer review. Specify the solicitation name and number, the type of document, and the number of copies required. Copies will be provided within 1 to 3 days, depending on the volume.