

**Research and Development Classification Process Survey Results  
For Session 5 Participants**

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## **Research and Development Classification Process Survey Results of Session 5 Participants**

The Research and Development Classification Process (RDCP) was established in July 2001 as the process by which the work and qualifications of high-grade scientists and engineers employed by NASA Langley Research Center are classified and any subsequent personnel actions are effected. The key characteristic of this process is application of the Office of Personnel Management (OPM) classification guides and standards through a consensus decision-making process of peer scientists and engineers. A panel of such peers is convened to provide technical review of the assignment, impact, and qualifications that the employee brings to the position. RDCP panel chairs and members are non-supervisory Langley employees. The Office of Human Resources (OHR) effects the recommendations of the panels in terms of updating the employee's position classification and any resulting promotion. The selection of employees for review in each session was determined by random weighted assignment and some limited management requests for those already identified as ready for review or needing deferral. All of the approximately 800 employees initially assigned to a session will be reviewed between the summer of 2001 and the summer of 2004. Five sessions have been conducted to date (starting in August 2001), reviewing a total of 386 employees in about 56 branches over 40 panels involving a total of 273 employees as panel members. The process has resulted in 154 employees' jobs classified at their current grade, 187 classified at the next highest grade, one classified below grade, with the remainder to be reviewed again due to either insufficient information or appropriate Guide not applied. This paper describes the results of a survey conducted with participants of the fifth RDCP session and briefly compares it with results of an earlier survey of Sessions 1 through 4 participants. The purpose of the survey was to provide information about how well the process is working and where it may need improvement.

A simple survey (see copy in Appendix A) was posted on the internal LaRC web for three weeks (March 7 through March 28, 2003) in order to obtain feedback from RDCP participants in Session 5. Responses to the 18 items were anonymous and voluntary.

### **Session 5 Survey Results**

Ninety-nine out of the approximately 163 Session 5 participants responded to the survey, a 61% response rate: 15 out of 29 Branch Heads, 42 out of 57 panel members, and 42 out of 77 reviewees. Table 1 is a summary of the responses for all of the questionnaire items. (Items 5 through 16 were ratings from 1 (strongly disagree) to 5 (strongly agree), with 0 meaning no opinion or not applicable.)

**Table 1. Summary of Responses to Questionnaire Items 1 through 17 for Session 5**

<b>Item No.</b>	<b>Item Name</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	Session participated	99	na	5.0	na	na
2	Guide used	99	1.0	2.0	na	na
3	Hours spent	99	3.0	200	60.75	37.44
4	RDCP Role	99	1.0	3.0	na	na
5	Fair selection	99	1.0	5.0	2.73	1.48
6	Adequate training	99	1.0	5.0	3.52	1.14
7	Adequate handbook	99	1.0	5.0	3.48	0.98
8	Understandable process	99	1.0	5.0	3.53	1.06
9	Clear criteria	99	1.0	5.0	3.03	1.13
10	Conducted consistently	99	1.0	5.0	2.95	1.28
11	Improved classification process	99	1.0	5.0	3.05	1.40
12	Improved promotion process	99	1.0	5.0	3.33	1.44
13	Improved morale	99	1.0	5.0	2.90	1.26
14	Adequate time	99	1.0	5.0	3.85	1.50
15	Agree with panel	99	1.0	5.0	3.87	1.20
16	Report adequate	99	1.0	5.0	3.49	1.23
17	Reviewee decision category	42	1.0	4.0	na	na

The average number of hours spent on the RDCP was about 61 but with statistically significant differences among branch heads (20 hours), panel members (73 hours), and reviewees (63 hours), with standard deviations, between 15 and 37 hours.

In general, the average rating scores were between 2.7 and 3.9. The average rating score of at least 3.0 (neither disagree nor agree) is used here as an arbitrary criteria for areas which are doing well. All but three items had average ratings greater than or equal to 3.0. Even these three items, Fair Selection (item 5), Conducted Consistently (item 10), and Improved Morale (item 13) had average ratings close to 3.0 (2.73, 2.95, and 2.90, respectively).

For Fair Selection, the branch heads had higher scores (average rating of 3.2) but these scores were not statistically significantly different from those of the panel members and reviewees (both 2.64, respectively). For Conducted Consistently, it was the reviewees' average scores that were lowest, 2.79. Again, this difference was not statistically significant among the roles of the participants. For Improved Morale, there was also no significant difference among the roles although the panel members had the lowest average rating of 2.76.

The only significant differences in any items by role of participant were for items 9 (Clear criteria) and 14 (Allowed adequate time). For item 9, the panel members did not agree that the criteria were clear (average rating 2.6), but the branch heads and reviewees indicated some agreement (3.4 and 3.3, respectively). For item 14, the branch heads did not agree (average rating 2.6) that they had adequate time to work on the RDCP although the panel members and reviewees did agree (4.0 for both). It was not clear from the comments whether the lack of time for the branch heads was due to other duties or due to little time allowed by the reviewees for their branch heads to edit the final packages.

The fact that 74 percent of all the respondents agreed or strongly agreed with the panel results is a very good indicator that RDCP is a process that provides valid results. Interestingly, the 15 responding Branch Heads had an average rating of 4.00 for this item, indicating that they did agree with the panel results. In fact, 73 percent of the branch heads agreed or strongly agreed with the panel results. Of the reviewees, 29 of the 42 respondents had been evaluated as above grade. They gave an average rating of 4.41 for Agree with Panel Decision (item 15), indicating strong agreement with the panel results. However, the 10 respondents who had been evaluated at grade had an average rating of 2.70, which indicated they disagreed with the panel results; only 30% of them agreed with the panel decision. The differences in ratings among roles for item 15 were not statistically significant although the differences among the reviewees by decision category were significant.

When Improved Morale (item 13) average ratings within reviewees were compared with the actual panel decision results, there was a significant difference by panel decision category. Not surprisingly, those reviewees who received promotions gave an average rating of 3.2 to the question about improved morale, whereas those who remained in their current grade gave an average rating of 2.5 for this item.

**Table 2. Practically Significant Correlation Coefficients ( $r \geq .45, p = .00$ ) for Session 5 participants**

Item	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Q3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Q4		1	-	-	-	-	-	-	-	-	-	-	-	-
Q5			1	-	-	-	-	-	-	-	-	-	-	-
Q6				1	.47	.59	-	-	-	-	-	-	-	-
Q7					1	.79	.58	-	-	.47	.59	-	-	.46
Q8						1	.48	-	-	.45	.54	-	-	-
Q9							1	-	-	-	.46	-	-	-
Q10								1	-	-	-	-	-	-
Q11									1	.66	.55	-	-	-
Q12										1	.68	-	-	-
Q13											1	-	-	.49
Q14												1	-	-
Q15													1	.55
Q16														1

Responses were examined in terms of correlations among items. A statistically significant correlation coefficient equal to or greater than  $r = .45$  was considered to be of practical or meaningful significance. From Table 2, above, items 6(Training), 7 (Handbook), and 8(RDCP understandable process) are correlated, which is to be expected as they are all related to training and understanding the process. Items 7 (Handbook) and Item 13 (Improved morale) each correlated with five items, more than any other items. And, some of these items were correlated with each other. Improved morale was related to not only the Handbook, but also the understanding of the process, clear criteria, improved classification and improved promotion processes (items 7, 8, 9,11, and 12, respectively). A further analysis indicated that improved morale ratings were affected mostly by the responses to item 12, indicating the RDCP is an improved promotion process. (Forty-seven % of the variance in the ratings for Improved Morale was explained by item 12 responses in a regression analysis.) Finally, the adequacy of the panel report (item 16) was correlated with agreeing with the panel decision (item 15).

### **Summary of Comments**

A summary of comments received by the respondents are in Appendix B. In general the comments dealt with comparison of the RDCP to perceptions of the old promotion process, role of management, concerns about the time involved, and concerns about consistency. Both positive and negative comments were received. All comments were read and studied. Some suggestions were passed on to the Advisory Committee for consideration. (The Advisory Committee did receive all the unedited comments for their own reading.) However, some comments are indicative that more training and information are needed to clear up some misperceptions about RDCP.

As a result of this feedback, some changes were made for Session 6, especially with respect to organization of the Employee Accomplishment Record. In addition, the Handbook was divided up into an LMC Center Procedure and an accompanying Guidance document, to which additional clarification was included. Furthermore, training slides were updated for additional information such as how sessions were originally assigned and how they are managed. Also, a RDCP status report was written and is under review for general release that provides many data on results for Sessions 1 through 4.

### **Comparison of Session 5 Survey Responses with Previous Sessions**

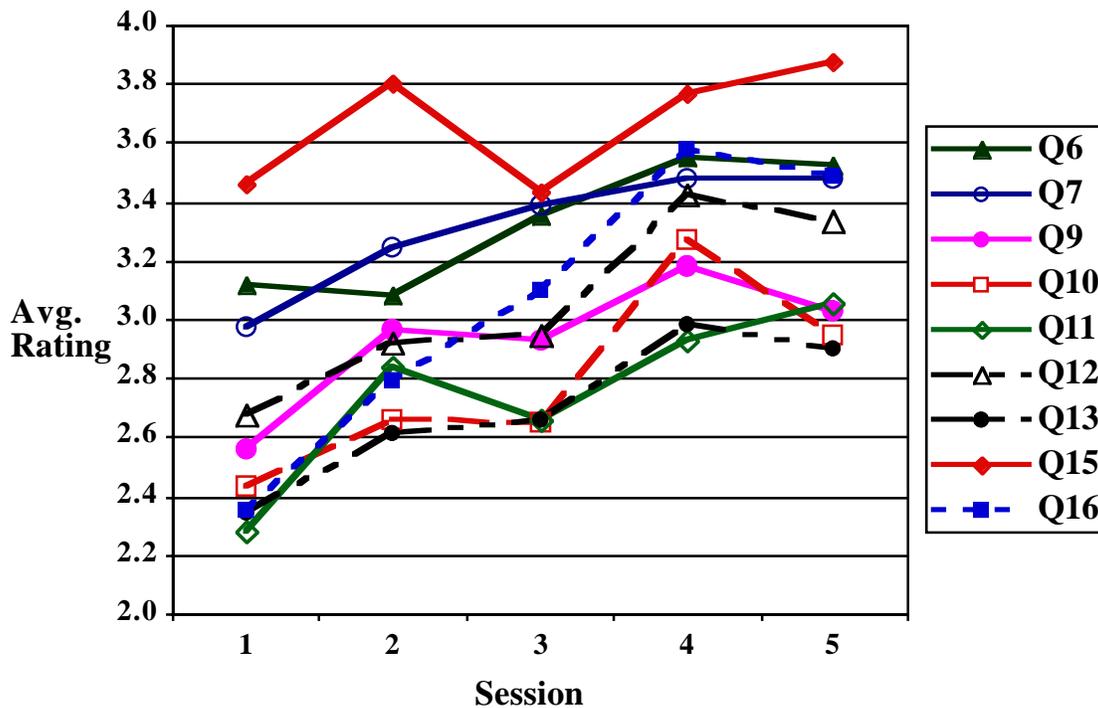
While ratings decreased slightly for some items from Session 4 to Session 5, these changes were not great. Overall, there was little change or some improvement in RDCP ratings from Session 4. In general, ratings increased from Session 1 to 5. (Results of Session 4 and earlier surveys can be found at <http://ohr.larc.nasa.gov/RDCP.html>.)

There were statistically significant differences across the sessions for many items. The average mean rating for these items for each session are shown in Table 3 and illustrated in Figure 1.

**Table 3. Average responses to Survey Items for Sessions 1 through 5**

ITEM	Session					Total
	1	2	3	4	5	
Time spent, Q3*	59.22	57.58	56.57	54.33	60.75	58.01
Fair selection, Q5*	2.86	2.80	2.61	2.98	2.73	2.78
Training, Q6	3.12	3.08	3.35	3.55	3.52	3.29
Handbook, Q7	2.97	3.24	3.39	3.48	3.48	3.29
Understandable, Q8*	3.27	3.43	3.55	3.67	3.53	3.47
Criteria, Q9	2.56	2.96	2.93	3.18	3.03	2.91
Consistent, Q10	2.43	2.66	2.65	3.27	2.95	2.74
Classification, Q11	2.28	2.84	2.66	2.93	3.05	2.73
Promotion, Q12	2.68	2.92	2.95	3.42	3.33	3.02
Morale, Q13	2.34	2.61	2.66	2.98	2.90	2.67
Time allowed, Q14*	3.50	3.68	3.92	3.83	3.85	3.74
Agreed, Q15	3.46	3.80	3.43	3.77	3.87	3.66
Report, Q16	2.35	2.79	3.10	3.58	3.49	2.99

\*Differences among sessions are not significant.

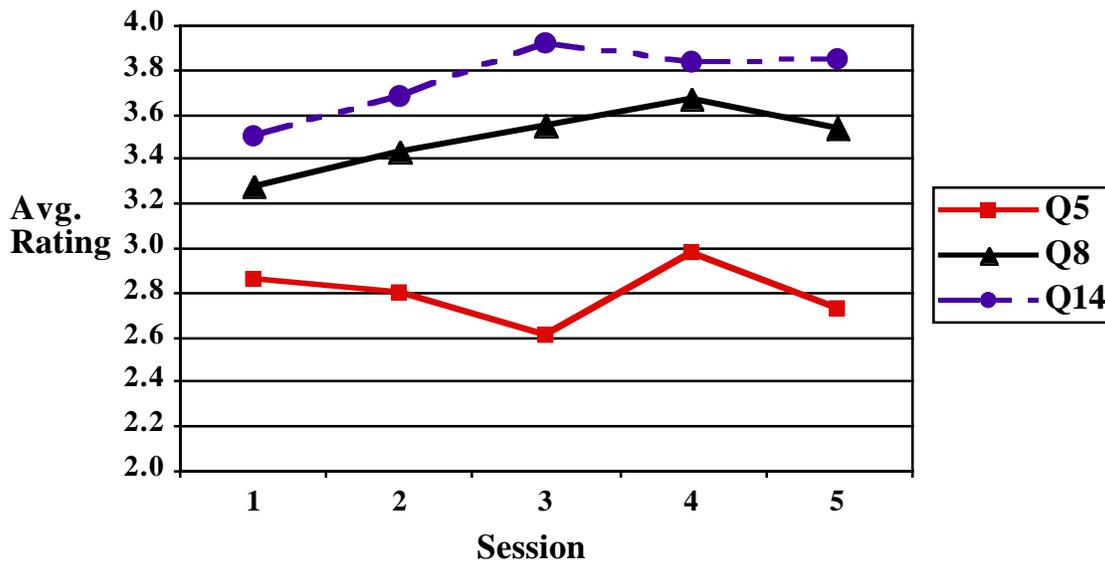


**Figure 1. Significant differences in average ratings among sessions.**

The highest ratings over all the sessions were for item 15, which means that most respondents agreed with the panel decision. The next highest ratings were for items 6 and 7 that deal with training and the RDCP Handbook, respectively. Item 16 had the

steepest increase in ratings across the sessions that indicated great improvement in the panel reports from session to session. Although the ratings have generally increased across sessions for items 10, 11, and 13, the latest ratings for these items are still marginally low. The increase in ratings for these items indicate that the process is conducted more consistently, is an improvement over old promotion processes, and has increased morale. However, there is room for improvement in all of these items so that they will continue to be addressed.

The average ratings for a few items have remained essentially the same across the sessions and did not differ statistically significantly. These are illustrated in Figure 2.



**Figure 2. Average ratings across sessions that did not differ significantly.**

That is, the ratings remained relatively low for Fair Selection (item 5) reflecting some comments received that the random selection process is not seen as fair or that some people do not understand the selection process. This is being addressed in training starting in Session 6. On the other hand, for items 8 and 14, respondents consistently rate these relatively high indicating that the RDCP is an understandable process and that adequate time was allowed for it.

## **Conclusions**

The RDCP is a peer review process to determine the appropriate grade level for person-in-the-job positions. Five sessions have been conducted to date (starting in August 2001), reviewing a total of 386 employees in about 56 branches over 40 panels involving a total of 273 employees as panel members. The process has resulted in 154 employees' jobs classified at their current grade, 187 classified at the next highest grade, one classified below grade, with the remainder to be reviewed again due to either insufficient information or appropriate Guide not applied. This paper described the results of a survey conducted with participants of the fifth RDCP session and compared it with results of previous surveys. The survey responses indicate increasingly greater understanding and satisfaction among RDCP participants. However, future changes will address improved training in describing the selection process for all participants as well as continued training in the criteria for classification. Efforts will continue to ensure as much consistency as possible among the peer groups and across the RDCP sessions.

## APPENDIX A

### Research and Classification Process Questionnaire

In order to improve the Research and Development Classification Process, feedback from all the participants is critical, whether you are a reviewee, a panel member, or a Branch Head. The survey below was designed to gather that feedback yet be quick and easy to do. While your participation in this survey is completely voluntary, your response would help form a more accurate picture of how the RDCP is progressing. Your responses are completely anonymous. The data will be analyzed and presented as representative of the entire sample, such as ranges, averages, variances, and percentages. This survey will close November 29 at 5:00pm. The results, but not the data, of the survey will be made available to all RDCP participants and will be posted on the RDCP website: <http://ohr.larc.nasa.gov/RDCP.html>. This survey, or one similar to it, will be repeated for each Session. Please respond to all items by clicking on the appropriate answer or by typing in the information requested. If you have participated in the RDCP in more than one role, such as a reviewee one session and a panel member another session, please fill out the survey twice, once for each role. Thank you for your help in improving the RDCP!

#### Section I

1. In which Session did you participate in the RDCP?  
Session 1  
Session 2
2. Please indicate which Guide you used for the RDCP.  
Research Grade Evaluation Guide  
Equipment Development Grade Evaluation Guide  
Other
3. Please estimate the amount of time, in hours, you spent working on the RDCP.
4. Please indicate your participant role.  
Branch Head/Supervisor  
Panel Member  
Reviewee

#### Section II

Scale (0=No Opinion or Don't Know, 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree):

5. The method used to select the Session for a person's review is fair to most RDCP AST researchers and developers :
6. Your RDCP training was adequate :
7. The RDCP Handbook was adequate :
8. The RDCP process is understandable :

9. The RDCP process provides clear criteria for classification of job duties :
10. The RDCP process is conducted consistently for most researchers, to your knowledge
11. The RDCP process is an improvement over the old classification process
12. The RDCP process is an improvement over the old promotion process :
13. Your morale has improved due to implementation of the RDCP process :
14. You were allowed adequate time to work on the RDCP :
15. You agree with the panel's decision(s) (regardless of role):
16. The panel evaluation report was adequate to explain the scores received:
  
17. If you were a reviewee, please indicate the panel's decision.
  - Above Grade
  - At Grade
  - Below Grade
  - Other
  
18. Please provide any general comments or explanations of above responses here.

## APPENDIX B

### Summary of RDCP Survey Comments from Session 5 RDCP Participants

Seventeen pages of text comments were received as part of the 99 survey responses. Many respondents made one or more comments. The comments seemed to cover both ends of the same spectra, that is, for every point someone made a negative comment about, at least one or more positive comment was made, and vice versa. Some of the comments are general dissatisfaction with having a RDCP type process versus a different system. However, several comments were about the RDCP itself. Most of the comments were of the same general categories as those from the earlier sessions.

Below is a listing representative of all the comments received. (The RDCP Advisory Committee received a copy of the complete, unedited comments.) Similar comments were received regardless of role of participant. Some of these concerns have already been addressed as of this writing, but plans are being made to address as many more as possible.

#### **General –**

- Everybody gets up to bat - less politics and waiting. Provides opportunity for promotion for everyone.
- Everybody gets a look at the federal classification process and must actively participate in it to understand what is expected for a high grade
- If we had had the "slots" to promote, the people promoted by RDCP would have been promoted by their supervisors in the old system.
- Employees make decisions about work based on how it would be viewed by an RDCP panel.
- The RDCP controls employees and their work by regular four-year reviews. Employees not trusted to do the work without these reviews.
- The concept of peer review is the most fair and honest for the reviewed employee.
- Good that there is an objective process, that a number of people have been recently promoted who have been long overdue, and that the average grade is moving up (in response to the fact that we are not keeping up with the salaries of universities and industry).
- RDCP does not allow promotion based on the "potential" of the reviewee, but rather evaluates on the work history/past performance.
- Decision making process is being pushed down to the lower level where technical capability can be evaluated in an appropriate manner.
- The RGEG is clearly out of step with the values stressed by management in recent years, specifically that researchers not concentrate on individual recognition but work on teams to address larger projects for the good of the Center.
- Stressful to have regular four-year reviews.
- The introspection required producing the package beneficial in terms of strategic career review and planning.
- Understand that the establishment of a process helped enable the elimination of quotas or caps on numbers in high-grade levels.
- RDCP is a much better, more objective promotion process than the old system.

- If there is value in having the researcher periodically justify his current grade to a panel, then it seems that there would be value in having everyone at the Center, especially managers, also periodically justify their current grade.
- Non-standard career paths are hard to evaluate under guidelines constructed assuming that everyone being evaluated is a lifelong NASA researcher.

#### **Managerial Responsibility-**

- Would like to use wild cards to choose from a randomly selected pool of all assigned reviewees with most of the reviewee slots filled by supervisor-named people.
- Have branch heads sit in on panel sessions as quiet observers so that they may better advise employees. (Note – Panels have rejected this request.)
- Have branch heads serve as IDRs
- Have branch heads serve as panel members
- Replace peer panel members with all branch heads
- Managers should be "grading" their employees. Otherwise, what is the point of the performance reviews?
- It seems that Branch Heads are not adequately reviewing RDCP write-ups for accuracy or for conformance to the RDCP guidance
- Only use peer panels to resolve disputes or appeals between managers and employees
- Reviewees and branch heads should be encouraged to be more brief and to the point, and clear and accurate. No hyperbole or fluff should be included.
- Received excellent feedback from supervisor and other reviewers of draft write-up.

#### **Time –**

- The process takes up too much time away from getting our mission accomplished.
- This process requires a significant amount of time for the reviewee and panel members. With full cost accounting, do not see the benefit for this resource commitment.
- Add the time spent on RDCP to the time that is spent doing other trivia such as time keeping, travel, financial management, and safety stand down; and a significant portion of the day is spent doing process rather than actual work.
- Center's productivity hurt by the time spent on RDCP.
- Preparation required additional time working on the package at home.

#### **Consistency and Quality–**

- There is variation in reviewer's opinions about criteria's meaning.
- Each panel member approaches the assignment with the seriousness that it deserves.
- There is non-uniformity from panel to panel as to the cutoff criteria for different grades. There are too many gray areas in the criteria.
- Process has been managed with the highest fairness and professionalism.

#### **Training-**

- The flexible nature of the RGEG Guidelines should be emphasized to all panel members immediately prior to beginning committee deliberations and throughout the proceedings to insure that criteria are not mismatched to the type of work being done.
- Provide guidelines for B and D definitions.

- The handbook was comprehensive. Edit it into other companion handbooks that cover RDCP policies, historical process chronologies, etc, for those who are interested.
- What method was used to select the quarter for a person's review?

**Process –**

- Expand the process to include more technical people here at LaRC.
- Rather than consensus panel decision, throw out high and low score or use 2/3-majority vote or average the scores.
- Include steps in the RDCP process that catch nonconformance to guidance before the package reaches a panel.
- Let employees initiate when they are reviewed rather than have regular reviews.
- Competency office should assign panel members rather than panel chairs finding them.
- Switch to a "permanent" panel system (such as ST panel or rotating higher grades with some management involvement)
- Would like to see one or two suggested sample IDR reports for some consistency.
- The IDR should propose a final write-up that the panel votes on or modifies. The panel should write the comment section.
- Keep number of reviewees to five people per panel. Can have multiple panels.
- Current grade and the last time a grade increase was obtained should be available to panels.
- To be completely objective panels should not know grade levels of reviewees.  
(Note: Existing grade levels are not discussed, whether or not known, because it is not relevant to establishing correct grade level for current work based on the Guide criteria.)
- The members of the RDCP panel should not know, nor have a working relationship with the reviewees, although it is helpful to know about their programs/projects in general.
- The wait between completing the package and getting the results was too long in my opinion.
- Overall, quite pleased with the RDCP process.
- Disclose the panel member names.
- The process seems well structured and very well implemented.
- RDCP does not provide a mechanism for giving credit to the management and marketing roles of researchers who have transitioned careers.
- Random selection process is not fair, especially now that the sessions are no longer held quarterly, as it bypasses deserving candidates and completely shuts out any influence of the branch head.
- Reviewees should not be given the criteria by which he/she is evaluated. The result is that the reviewee writes his accomplishments to meet the criteria with certain key words at the appropriate places.
- The in-depth-reviewer should be required to contact the reference from outside NASA and other non-supervisors
- Provide enough budget to review everyone in a timely fashion.