

**Research and Development Classification Process Survey Results
of Session 8 Participants**

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The Research and Development Classification Process (RDCP) was established in July 2001 as the process by which the work and qualifications of high-grade (GS-13 to GS-15) 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 the initial nine sessions 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 are to be reviewed between the summer of 2001 and the summer of 2005. Eight sessions have been conducted to date (starting in August 2001), reviewing a total of 572 employees in about 54 branches across 66 panels involving a total of 428 employees as panel members. The process has resulted in 224 employees' jobs classified at their current grade, 292 classified at the next highest grade, three scored as 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 eighth RDCP session and briefly compares it with results of earlier surveys of Sessions 1 through 7 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 (July 16 through August 30, 2004) in order to obtain feedback from RDCP participants in Session 8. Responses to the 18 items were anonymous and voluntary.

Session 8 Survey Results

Seventy-three out of the approximately 135 Session 8 participants responded to the survey, a 54% response rate: 10 out of 39 Branch Heads and Assistant Branch Heads, 32 out of 44 panel members, and 31 out of 52 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 8 (with “No Opinion” responses omitted)

Item No.	Item Name	N	Minimum	Maximum	Mean	Std. Deviation
1	Session participated	73	na	na	na	na
2	Guide used	73	1.0	2.0	na	na
3	Hours spent	73	2.0	250	61.08	41.94
4	RDCP Role	73	1.0	3.0	na	na
5	Fair selection	60	1.0	5.0	3.40	1.01
6	Adequate training	71	1.0	5.0	3.82	0.92
7	Adequate handbook	71	1.0	5.0	3.59	0.89
8	Understandable process	73	1.0	5.0	3.74	0.88
9	Clear criteria	72	1.0	5.0	3.19	1.11
10	Conducted consistently	69	1.0	5.0	3.41	1.18
11	Improved classification process	61	1.0	5.0	3.59	1.23
12	Improved promotion process	65	1.0	5.0	3.55	1.33
13	Improved morale	70	1.0	5.0	3.11	1.37
14	Adequate time	67	1.0	5.0	4.33	0.93
15	Agree with panel	70	1.0	5.0	3.73	1.30
16	Report adequate	68	1.0	5.0	3.62	1.18
17	Reviewee decision category	30	1.0	4.0	na	na

The average number of hours recalled being spent on the RDCP was about 61 but with statistically significant differences between branch heads (average 22 hours, standard deviation of 15 hours), and panel members (average 67 hours, standard deviation of 49 hours), and reviewees (average 67 hours, standard deviation of 33 hours). There was no significant difference between reviewee and panel member average time spent. The branch head's and panel members' time were for all his or her reviewees, rather than per reviewee.

In general, the average rating scores were between 3.11 and 4.33. 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 twelve items had average ratings greater than or equal to 3.0.

The only significant difference in any rating item by role of participant was for Item 16 (Adequate Panel Report). For item 16, the panel members indicated stronger agreement that the RDCP panel reports were adequate (average rating of 4.17) than either the branch heads or reviewees, although their average ratings were not especially low (3.20 and 3.18, respectively). Even though there was a significant difference in the actual amount

of time used in the process by role (e.g., branch heads used the least), all participants, on average, indicated that they were allowed adequate time.

The fact that 70 percent of all the respondents agreed or strongly agreed with the panel results indicates that RDCP is a process that provides valid results. Interestingly, 5 of the 10 branch heads responding to this item disagreed or strongly disagreed with the panel results while the majority of both reviewees and panel members agreed or strongly agreed with the panel results. Of the reviewees, 13 of the 29 respondents had been evaluated as above grade. They gave an average rating of 4.38 for Agree with Panel Decision (item 15), indicating strong agreement with the panel results. However, the 14 respondents who had been evaluated at grade had an average rating of 2.71, which indicated they disagreed with the panel results. This was a statistically significant difference.

Improved Morale (item 13) average ratings within reviewees were compared with the actual panel decision results. Not surprisingly, those reviewees who received promotions gave higher ratings (average rating of 3.6) to the question about improved morale compared to those who remained in their current grade (average rating of 2.5) for this item. However, these ratings were *not* statistically significant.

Table 2. Practically Significant Correlation Coefficients ($r \geq .45, p = .00$) for Session 8 participants

Item	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Q3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Q4		1	-	-	-	-	-	-	-	-	-	-	-	-
Q5			1	-	-	-	-	-	-	-	-	-	-	-
Q6				1	-	-	-	-	-	-	-	-	-	-
Q7					1	.56	-	-	-	-	.51	-	-	-
Q8						1	.58	.51	-	-	.47	-	-	-
Q9							1	.57	.50	-	.50	-	.48	-
Q10								1	-	-	-	-	.53	-
Q11									1	.84	.69	-	.48	.48
Q12										1	.74	-	.53	.53
Q13											1	-	.52	.57
Q14												1	-	-
Q15													1	.72
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, item 8 (Understandable Process), item 9 (Clear Criteria), and item 10 (Conducted Consistently) are correlated, which is to be expected as they are all related to operation of the process. Item 13 (Improved Morale) was correlated with 7 items, more than any other item. However, a multiple regression analysis indicated that Item 12 (Improved Promotion Process)

significantly accounted for the most variance (66%) in the average rating for Item 13. Apparently, thinking the RDCP is an improved promotion process is important in improved morale due to RDCP. RDCP being an understandable process (item 8) also contributed to explaining some variance (9%) in the average rating for Improved Morale.

Summary of Comments

A summary of comments received by the respondents is in Appendix B. In general the comments dealt with the 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. (The Advisory Committee did receive all the unedited comments for their own reading.) Some comments are indicative that more training and information are needed to clear up some misperceptions about RDCP.

Comments contained similar thoughts to those given for earlier sessions. Some of the comments are general dissatisfaction with having a RDCP type process versus a different system. However, most comments were about the RDCP itself and indicated a greater acceptance of the process.

Some general themes in the comments include the following: There are concerns with consistency in applying the evaluation criteria across sessions and panels and that interpretation of the criteria are too subjective. This related to comments about training as well. More definitions of the criteria are desired. The time involved in both preparation and evaluation is thought to be too great.

What *wasn't* seen as much in the comments from earlier surveys were concerns about how the process worked. People seemed to understand the purpose of the peer reviews, the roles of the Branch Heads, and In-Depth Reviewers. A few people indicated a misunderstanding about the composition of the peer groups. The peer panels do in fact contain representatives from the branches of the reviewees or who are knowledgeable about at least one of the reviewees, in addition to an outside peer group person for perspective and consistency across peer groups. A few thought wildcards were a good thing and some thought they were not fair to others waiting. (Each Competency received one wildcard in Session 8.) Some people thought more people with longer time-in-grade were in the later sessions. That may be true as time has passed since the initial assignments thus more time has been added to TIG, but in the initial assignments the TIGs were relatively equally distributed. (Detailed data about the session assignments and results through Session 7 can be found in the latest Status Report at <http://ohr.larc.nasa.gov/rdcp/feedback.reports.html>.)

People also seem to realize that the work they do does determine their grade level, in that work of a certain scope, impact, and level of responsibility equates to a particular degree score. To change that score, they realize they must do different work. There does appear some frustration that the higher-level opportunities are limited, especially for GS-15. More types of GS-15 jobs are desired as well as the descriptions of those.

As a result of this feedback, some changes are being made for Session 9. Training will provide more information about the evaluation criteria. It also will include more emphasis on the panel selection process and the In-Depth Reviewer’s function.

Comparison of Session 8 Survey Responses with Previous Sessions

Overall, there was little change or some improvement in RDCP ratings from Session 7. In general, ratings increased from Session 1 to 8. (Results of Session 7 and earlier surveys can be found at <http://ohr.larc.nasa.gov/rdcp/>.)

The average ratings for each item for each session are shown in Table 3 (corrected for missing data). The highest ratings over all the sessions were for item 14, which means that most respondents were allowed adequate time for RDCP, even though in the comments people indicate that it is too time intensive (around 60 hours on average). There was no statistical difference in time spent on RDCP across the sessions and neither was there any correlation between time spent and the panel decision.

The next highest ratings were for items 15 and 8 that indicate respondents agreed with the panel decisions and that RDCP is an understandable process, respectively. There were no statistical differences across the sessions for either of these two items. These are two very important items and indicate that the process is valid.

Table 3. Average responses to Survey Items for Sessions 1 through 8 (excluding missing data)

ITEM	SESSION								TOTAL
	1	2	3	4	5	6	7	8	
Q3-Time spent	58.61	54.65	57.95	51.39	59.47	63.71	64.19	59.02	58.44
Q5-Fair reviewee selection	3.16	3.32	3.07	3.35	3.11	3.44	3.25	3.48	3.25
Q6-Training adequate*	3.23	3.01	3.40	3.63	3.71	3.71	3.75	3.90	3.49
Q7- Guidebook/CP adequate*	3.08	3.21	3.40	3.60	3.50	3.65	3.61	3.64	3.42
Q8- Understandable process	3.39	3.39	3.53	3.60	3.58	3.82	3.75	3.71	3.57
Q9- Clear criteria*	2.67	3.00	3.07	3.09	3.14	3.27	3.14	3.28	3.05
Q10- Consistently conducted*	2.73	2.98	2.92	3.35	3.18	3.05	2.97	3.57	3.06
Q11- Improved classification process*	2.85	3.21	2.97	3.39	3.32	3.42	3.44	3.78	3.25
Q12- Improved promotion process*	2.93	3.25	2.83	3.74	3.44	3.51	3.36	3.83	3.31
Q13- Improved morale*	2.49	2.72	2.60	3.19	2.97	2.96	3.00	3.43	2.87
Q14- Adequate time allowed*	3.67	3.79	4.13	3.88	4.04	4.07	4.33	4.33	3.99
Q15- Agree with panel decision	3.45	3.77	3.48	3.81	3.88	3.47	3.86	3.88	3.68
Q16- Adequate panel report*	2.57	3.04	3.32	3.77	3.62	3.27	3.58	3.67	3.28

There were statistically significant differences from a multivariate analysis of variance across the sessions for many items, which are shown as starred in Table 3 above and are illustrated in Figure 1 below.

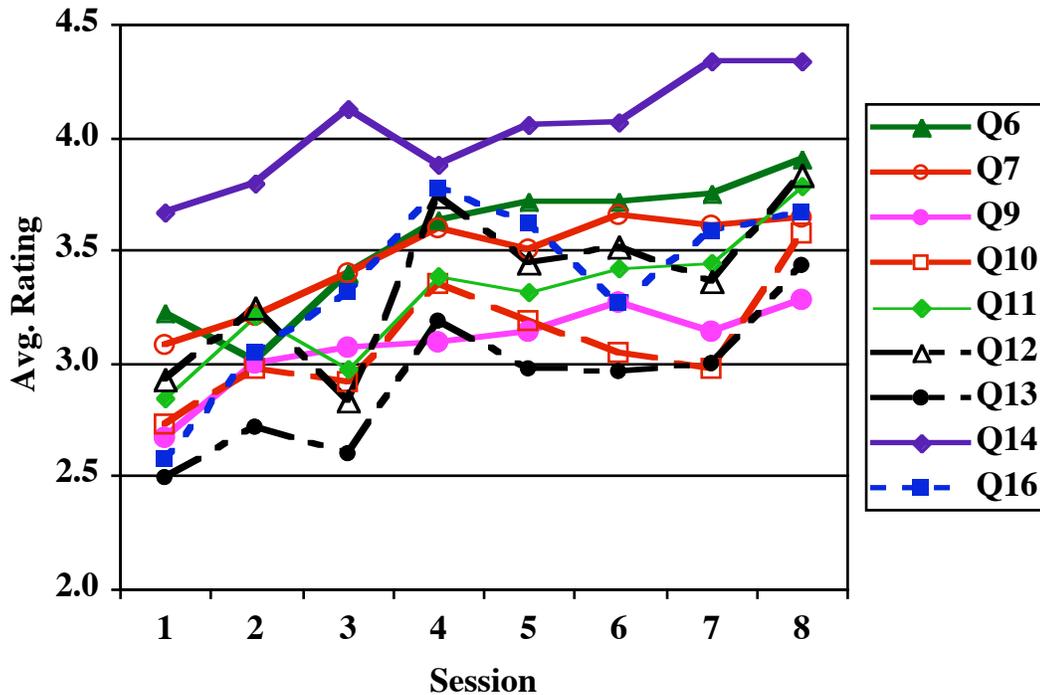


Figure 1. Significant differences in average ratings among sessions (with “No Opinion” responses omitted).

The ratings have generally increased between Session 1 and Session 8 indicating improvements in and/or greater understanding of the RDCP. Although there have been small fluctuations for some items across the sessions, all the ratings are higher for Session 8 than they were for the first session. And, for the first time, all ratings are higher than 3.0. RDCP and issues related to it seem to have improved to a satisfactory level on average.

In particular, the average rating for improved morale (item 13) increased in Session 8 from prior sessions. Using a multiple regression analysis, the ratings for Improved Promotion process (item 12) explained the most variance, 60%, of the Improved Morale ratings, whereas the other items only explained small additional amounts of variance (1 to 3%). Thus, perceiving RDCP as an improved promotion process is an important component of improved morale.

The average ratings for a few items have remained essentially the same across the sessions and did not differ statistically significantly. Except for Item 3 (Time spent on RDCP), these are illustrated in Figure 2. Ratings for the three items, Fair Selection (item

5), Understandable Process (item 8), and Agree with Panel Decision (item 15) were always higher than 3.0, but either only slightly changed from session to session or had equal fluctuations across sessions.

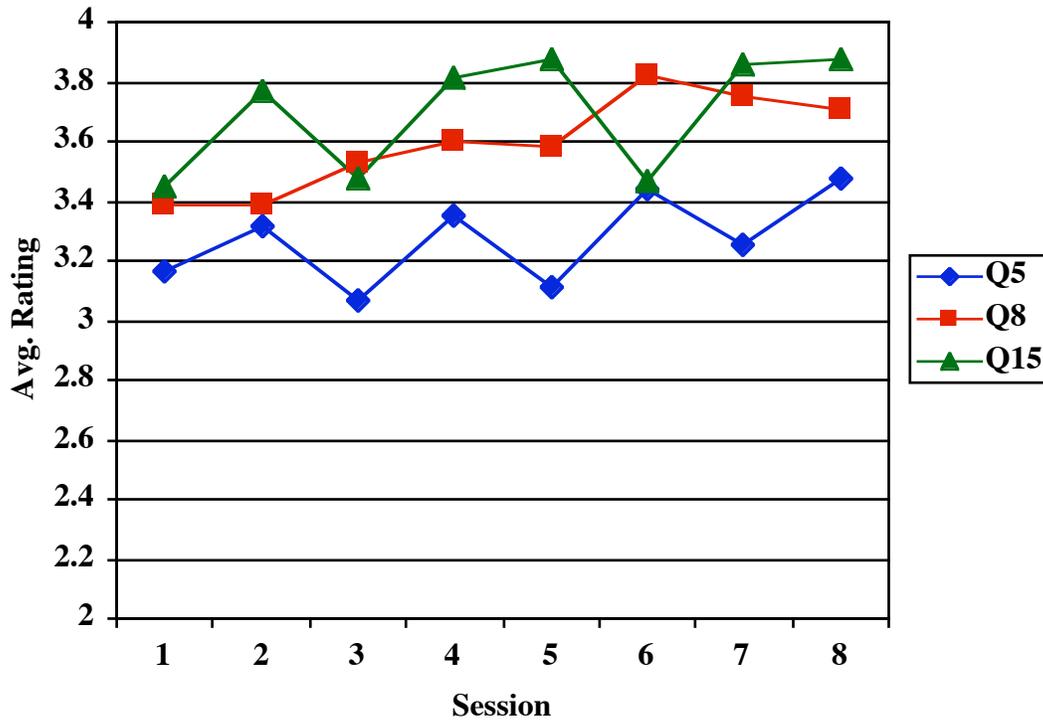


Figure 2. Average ratings across sessions 1 through 8 that did not differ significantly (excluding missing data).

The ratings remained relatively neutral 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. (There was a small significant correlation between Fair Selection and Understandable Process ($r = .27$).) With the exception of a few wild cards, selection for review was random and was not based on likelihood of any person’s promotion. This explanation started being addressed in training for Session 6. The consistently higher ratings for Item 15 indicate that respondents tend to agree with the panel decisions.

Conclusions

The RDCP is a peer review process to determine the appropriate grade level for person-in-the-job positions. Eight sessions have been conducted to date (starting in August 2001), reviewing a total of 572 employees in about 54 branches across 66 panels involving a total of 428 employees as panel members. The process has resulted in 224 employees' jobs classified at their current grade, 292 classified at the next highest grade, three scored as 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 seventh RDCP session and compared it with results of previous surveys.

The survey responses indicate increasingly greater understanding and satisfaction among RDCP participants. In particular, higher ratings for improved morale were given, due in large part to perceiving RDCP as an improved promotion process. Efforts will continue to ensure as much consistency as possible among the peer groups and across the RDCP sessions. Future training will include more emphasis on the panel selection process and the In-Depth Reviewer's function. There is one more of the originally assigned sessions to be conducted, starting in the fall of 2004. By the end of that session, RDCP will have established a baseline placing the majority of R&T AST scientists and engineers in their appropriate grade level.

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 January 28 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?
(the Session number is automatically entered)
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 CP/Guidebook 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 8 RDCP Participants

Six pages of text comments were received as part of the 73 survey responses, which are fewer pages than have been received from earlier surveys. However, the comments contained similar thoughts to those given for earlier sessions. 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, most comments were about the RDCP itself.

Some general themes in the comments include the following: There are concerns with consistency in applying the evaluation criteria across sessions and panels and that interpretation of the criteria are too subjective. This related to comments about training as well. More definitions of the criteria are desired. The time involved in both preparation and evaluation is thought to be too great. Also, some people think Branch Heads should play all or more of a part in conducting the evaluations. However, others think that Branch Heads do not have the knowledge about the research or the individuals to be able to do this adequately. More attention to providing correct, but succinct, information in the reviewee packages was mentioned. Some respondents were concerned that panel members' personal opinions of reviewees affected evaluations while others thought the panels were very impartial and thorough. In general, for a variety of reasons, some people thought RDCP was a good idea and some didn't.

What wasn't seen as much in the comments were concerns about how the process worked. People seemed to understand the purpose of the peer reviews, the roles of the Branch Heads, and In Depth Reviewers. Only a few people indicated a misunderstanding about the composition of the peer groups. They do in fact contain representatives from the branches of the reviewees or who are knowledgeable about at least one of the reviewees, in addition to an outside peer group person for perspective and consistency across peer groups. A few thought wildcards were a good thing and some thought they were not fair to others waiting. (Each Competency received one wildcard in Session 8.) Some people thought more people with longer time-in-grade were in the later sessions. That may be true as time has passed since the initial assignments thus more time has been added to TIG, but in the initial assignment the TIGs were relatively equally distributed. (Detailed data about the session assignments and results through Session 7 can be found in the latest Status Report at <http://ohr.larc.nasa.gov/rdcp/feedback/reports.html>.)

People also seem to realize that the work they do does determine their grade level, in that work of a certain scope or level of responsibility equates to a particular degree score. To change that score, they realize they must do different work. There does appear some frustration that the higher-level opportunities are limited, especially for GS-15. More types of GS-15 jobs are desired and the descriptions of those are desired.

Below is a listing representative of all the comments received. (The RDCP Advisory Committee received a copy of the complete, unedited comments, as they always do.) 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-

- RDCP has really boosted morale for the many deserving people who would never have been rewarded under the old system.
- Delays in the RDCP process have negatively impacted morale.
- The RDCP process doesn't cover all types of positions well. Need a better way to evaluate other types of positions.
- RDCP is SIGNIFICANTLY BETTER than the old way, and should be kept.
- Need information on how process will be run after Session 9 and how will subsequent reviews will be inserted.
- Evaluation Guides provide general information on what is needed to obtain higher graded positions, but need more Langley specific examples of each degree, including Degree D.
- Although this was a significant burden, I realize the importance of the process and the value by peer review.

Managerial Responsibility-

- If the same standards and documentation were used, branch heads could do the evaluations as well or better than the panels with less time.
- Branch Heads need to do a better job reviewing employee packages.
- The branch heads should be intimately involved in the initial definition of Factors 1 and 2 to assure the proper prospective and relevance of work and supervision is clearly stated.
- Branch Heads should be participants, perhaps nonvoting, in the panel meetings.

Time -

- Considerable amount of time to do the IDRs to be very thorough.
- Shorter packages desired to save time for everyone.
- Process takes considerable time both for package preparation and reviews.

Consistency and Quality-

- Having the RDCP manager and Human resources representative sit in on deliberation for all panels makes me feel like panels are conducted as consistently as possible.
- Think the panels are not consistent in their application of the grade criteria from session to session.
- Think panel did a very thorough and high integrity job.

Training-

- Training should be extended to discuss the guide criteria more thoroughly.
- Provide more examples of Langley positions for each degree in each factor.

- Put more emphasis on the importance of the In Depth Reviewer's job.

Process -

- Simplify the package so that it is better than old style "one pager" but not the "life time essay" as it is now. Perhaps 2-3 pages covering the last five years.
- Frustrated that there is no more delineation between what constitutes a "B" or "D" in scoring (just above "A" but just shy of "C", etc.). Scores like "B" and "D" cover a lot of ground.
- The panel was fair and accurate and the decisions were based on merit with significant discussion and consideration.
- The makeup of the panel was intentionally diverse which both brought a level of differing, dispassionate perspective and an intimate knowledge of the individuals and their work to fill in informational gaps on the spot.
- Having the outside peer group representative was good.
- The OHR representatives should participate more in the discussions.