## FAX

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## Subject: RATING PROCEDURES

## 1) BONUS POINTS

- Awarded to players who achieve a statistically significant outperformance. Statistical considerations establish certain thresholds for a rating gain beyond which it becomes accepted that a player is substantially undergraded.
- The thresholds are:

N Threshold

$\overline{4} \quad$| 32 | 3 |
| :--- | :--- | :--- |$\quad$ BONUS $=1$ point for each rating point gain

535 addition
638 for
741 each

IMPORTANT NOTE
844 game
These limits apply only when $\mathrm{K}=32$
So for for other K factors, first calculate for $\mathrm{K}=32$, then adjust.

| 10 | 50 |  |
| :--- | :--- | :--- |
| 11 | 52 | 2 pt |

1254 addition
etc.

- Only players whose post event rating is $<2100$ may receive bonus points. No player may pass 2100 by means of bonus points.
- Gain + Bonus should not result in the new grade exceeding Rp.
- No player where $\mathrm{K}=24$ applies is entitled to bonus. [See below]

2) FEEDBACK

- A player whose opponent earns bonus will have his game against that opponent rerated using the opponents Rp or new rating, whichever is the lower. [The USCF use Rp , but this would most likely be inflationary in our case]
- In the case of ungraded or provisionally graded players, the feedback is the opponents Gain + Bonus divided by the number of games on which the rating is based.

3) K FACTORS

- $\mathrm{K}=16$ applies to all players $>=2100$
- $\mathrm{K}=40$ applies to those $<21$ years old whose rating is $<2100$
- $K=32$ applies to those $>=21$ years old, whose rating is $<2100$, and where the difference between the players "Start Year" and the current year $<=8$
- $\mathrm{K}=24$ all others.
[Note: the current list year is 89 , your "Start Year" is given as 70 so in your case $\mathrm{K}=24$ applies. This control tends to protect the grades of settled players]
- The higher K factor is the only distinguishing feature in the rating of those $<21$.

4) FEMALE PLAYERS

No special rules. But they should be identified as such for selection purposes.
5) PROVISIONAL PLAYERS

Where $\mathrm{N}<20$, treat as Prov. If in rating an event, N goes from, say, 18 to 24, the formula for a Prov. player applies throughout. After the event the player will be recognized as fully graded.
6) $\mathrm{U} / \mathrm{Gs} \mathrm{v} \mathrm{U/Gs}$

A game where an U/G plays another U/G must be disregarded if there is no other interplay against graded players. But if there is, then we enter the world of simultaneous equations. These lend themselves to easy solution by iterative methods. For any U/G player we get an
estimate of his rating by his results against rated players only. Then these estimates are successively revised taking into account his play against other U/G players and their estimated ratings. Finally, you wind up with a set of consistent ratings, i.e. where an estimate does not change significantly from one iteration to the next.
7) ORDER OF RATINGS

- U/G players
- Prov. players
- Revise those U/G \& Prov. players who played Prov. players, i.e. rerate them against their post event rating [or their Rp if this is higher - provided the number of games on which this Rp is based is $>=5$ ]
- Graded players.

Hope this helps

Fred

