

The Measure Of A Middle Reliever

Written by {ga=paulcousineau}

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In this age of exhaustive statistical analysis, the evaluation of middle relief pitchers has remained an elusive skill to quantify with a simple formula. But Paul Cousineau thinks he may have found one. In addition to providing analysis of how all the Indians non-Borowski relievers shape up this season, Paul also measures Raffie Betancourt against the best set up men in the majors.



In this age of exhaustive statistical analysis, the evaluation of relief pitchers has remained an elusive skill to quantify with a simple formula. Closers, obviously, are judged by the number of saves that they amass in a season and the percentage by which they convert their save opportunities. But the rest of the bullpen cannot be judged by such standards, unless you count the "Hold", which is a start on the quantification of quality.

ERA is a nice statistic if a relief pitcher starts and finishes an inning as all of the runs earned are of that pitcher's making. But that rarely happens with middle relievers as they often pitch for such a short period of time that their ERA becomes skewed one way or another, depending upon how the OTHER pitchers who precede them and follow them perform.

Let's say that Nasty Boy Tom Mastny relieves Paul Byrd with two men on and two outs, allows both to score via singles, then gets the final out with a fly out. He's credited with pitching a 1/3 inning with no earned runs while Byrd is charged for Mastny's inability to get the third out. Sure, some of the onus lies at Byrd's feet for allowing the base runners in the first place, but if a primary function of a reliever is

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to get his team out of jams, ERA has its limitations.

An enormous portion of being an effective relief pitcher is an ability to strand inherited runners. That is, if The Scarecrow (Rafael Perez) comes on with the bases loaded and two outs and is able to get out of the inning without giving up a run, he has been far more effective than Mastny in the previous example while both will simply be credited with zero ER in 1/3 IP.

Well, it turns out that such a statistic does exist (though not as easily obtained as you might think it would be) and the statistic is simply Inherited Runners Stranded Percentage, or IRS %. Essentially, you can calculate the number of Inherited Runners that a pitcher strands on the bases against the number that he allows to score to determine the effectiveness of that pitcher when coming into a game with runners on base.

It's easy to look at a relief pitcher's WHIP and ERA and say that they are doing well or struggling, but it really requires the IRS % into the equation to truly determine how effective relievers have been for a team.

Probably the best two figures to determine the measure of a middle reliever would be to use ERA to figure how a pitcher fares when starting an inning and the IRS% to measure how they handle entering an inning with inherited runners.

So, without further ado, using only pitchers who have inherited 10 or more runners to this point at the All-Star Break, the highest IRS %, and corresponding ERA, breaks down like this:

Player	ERA	IRRS	IRS %	
Michael Wuertz, Cl	3.40	18	18	100%
Justin Speier, LAA	1.69	13	13	100%
Doug Brocail, SD	3.03	12	12	100%
Sean White, Sea	7.03	10	10	100%
Dennys Reyes, Mir	3.86	19	18	95%

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Jeremy Accardo, Tor	0.80	17	16	94%
Hideki Okajima, Bos	0.83	16	15	94%
Carlos Marmol, Chi	0.96	15	14	93%
Chin-hui Tsao, LAI	3.00	14	13	93%
Rafael Perez, Cle	2.22	14	13	93%
Santiago Casilla, O	0.45	13	12	92%
Rafael Betancourt, Cle	1.13	22	20	91%
Steve Kline, SF	3.76	11	10	91%
Frank Francisco, Tex	0.78	21	19	90%
Brian Moehler, Hou	5.57	10	9	90%
Aaron Heilman, NYM	1.83	19	17	89%
Joe Beimel, LAD	3.96	27	24	89%
David Riske, KC	2.21	17	15	88%
Cla Meredith, SD	3.43	16	14	88%
Willie Eyre, Tex	3.64	16	14	88%
Pat Neshek, Min	1.70	30	26	87%
Will Ohman, ChC	4.15	28	24	86%
George Sherrill, Sea	1.29	40	34	85%
Scott Downs, Tor	2.41	20	17	85%
Pedro Feliciano, N	2.51	33	28	85%
Jonathan Sanchez, SF	3.56	13	11	85%
J.J. Putz, Sea	0.88	19	16	84%
Bobby Seay, Det	3.52	25	21	84%
Sean Green, Sea	2.53	18	15	83%
Brandon Morrow, Sea	1.56	18	15	83%
Trever Miller, Hou	6.75	34	28	82%
Jose Mesa, Det	8.28	17	14	82%
J.C. Romero, Bos	2.74	17	14	82%
Kevin Gregg, Fla	3.02	17	14	82%
Kirk Saarloos, Cin	6.85	11	9	82%
Jonah Bayliss, Pit	7.53	27	22	81%
Justin Miller, Fla	2.42	16	13	81%
Gary Glover, TB	5.32	25	20	80%
John Grabow, Pit	5.32	20	16	80%
Aaron Sele, NYM	4.41	15	12	80%
Ray King, Was	5.40	15	12	80%
Ron Villone, NYY	3.26	10	8	80%
Francisco Cordero	2.86	10	8	80%
Clay Condrey, Phi	7.36	10	8	80%
Brian Shouse, Mil	2.95	44	35	80%

That's the list up to 80% effectiveness.

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Obviously, you can throw out the high ERA's (bye-bye Joe Table and your 8.28 ERA, regardless of IRS%), but there are a lot of effective relievers on the list, if not household names. Not surprising that Speier, Accardo, Okajima, Neshek, Putz, or Cordero show up on the list but how about the season that David Riske is having?

After looking at that list, what stands out? Most know that Senor Slo-Mo (Betancourt) and The Scarecrow (Perez) have been superb in middle relief, but these numbers show how excellent they've been compared to the rest of the league.

But wait, you say, Rafael² are the only Indians on the list. And here lies the problem with the Indians' current bullpen.

The numbers for the rest of the Tribe's current bullpen:

Edwin Mujica, Cle	11	1	0%
Joe Borowski, Cle	6	5	83%
Tom Mastny, Cle	16	11	69%
Aaron Fultz, Cle	39	26	67%
Fernando Cabre	4	1	25%
Jason Stanford, Cle	4	0	0%

That's right, despite a sterling 1.71 ERA, Aaron Fultz has allowed about 1/3 of his inherited runners to score, which is not a great number when you're thought to be the match-up lefty on a team and generally don't come in at the beginning of an inning.

Borowski gets a bit of a pass as he generally comes in to start an

inning, though his IRS% is pretty good in a small number. Again, though, the beauty of the IRS % is it quantifies a reliever's effectiveness when thrown into a tough spot. Of course, certain pitchers come in to start an inning (set-up guys and closers like JoeBo), but some elite pitchers that you would imagine would be overall effective relievers are, in fact, much worse with Inherited Runners:

Scot Shields - LAA - 1.70 ERA, 60% IRS (25/15)

But back to the Tribe bullpen and notably the fact that Mastny, who most people count as the 4th reliever that Wedge can use, is not exactly leaving a lot of ducks on the pond. Consider that Roberto Hernandez's numbers with the Indians were a 6.23 ERA and the identical 69% IRS (16/11) that Mastny has and it's obvious that a problem exists when he's your 4th best option.

With Mujica and Stanford, their numbers are based on such small sample sizes that they can almost be dismissed. Speaking of dismissed, Mujica is likely to be sent back to Buffalo soon anyways and Stanford is simply the long man until the Indians decide where to send him and for what parts.

While those two haven't been in Cleveland long enough to make a true judgment, how about the fact that Fernando Cabrera has inherited all of 4 runners in 32 1/3 IP over 22 games. Not exactly a ringing endorsement of Cabrera's ability to perform the in clutch or get a team out of a jam. Mike

Koplove almost has as many (3) in 4 IP over 3 games!

The problem that results from not having effective middle relief, not to mention that it wears your effective relievers ragged, is that it gives the Indians no bridge to the 7th, 8th, and 9th innings, where their effective relievers can take over. With the Indians' offense showing it's ability to claw back into games, it's necessary for the middle relievers to keep the game close and give the offense a chance to win the game.

So, how does a team like the Indians (whose overall IRS % sits at 73%, which means that basically 1 of 4 inherited runners score) do with this statistic? A combination of ERA and IRS % can be used to show a pitcher's effectiveness to start an inning and also with runners on. But it also gives them an idea of who should enter games with runners on base and whether a reliever is better at starting an inning (as Jason Dangerously famously was) or has the intestinal fortitude to douse the flames of an already burning fire.

What these numbers show is that the Indians need to continue to give Rafael Perez the ball in the 7th inning

and should not hesitate to summon him with runners on base. On the other hand it shows that Aaron Fultz should not be used as a match-up lefty (with his low ERA and high IRS % may be more suited to start an inning), but should pitch at the beginning of innings.

It shows that Mastny should not be counted on as a vital piece of the bullpen yet. While he has shown some promise, to include him in the group with The Big Borowski and The Two Rafaels is wishful thinking. It also backs up the obvious fact that Cabrera has become a complete liability in the bullpen and that the final piece still needs to be determined.

However the Indians eventually construct this effective bullpen, a move is going to have to be made soon before Wedge taxes Borowski and Betancourt, risking (knocking firmly on wood) any kind of injury to the back end of the bullpen. It essentially shows that the Indians are two and maybe even three effective relievers away from

having a bullpen that is truly effective in all aspects of their responsibilities.

Whether the relievers that can improve this percentage of inherited runners are within the organization (Matt Miller, Atom Miller, Mike Koplove, or Jensen Lewis) or need to be found elsewhere in MLB is what faces the Indians at this point is what the Indians need to determine to keep the team on top of the AL Central through the long summer ahead.