I REMEMBER WHEN

A Collection of Memories by Baseball's Biggest Fans

Interviews by
Abe Schear



George Nemhauser
Master Scheduler

With an unbalanced schedule, inter-league games, coast-to-coast travel, network considerations, weather concerns and union contracts, how could scheduling baseball be anything but a nightmare? Perhaps it is, but you would never know it from talking with MLB's master scheduler, George Nemhauser. Totally self-effacing in his modest Georgia Tech office, he and his team schedule baseball year after year (as well as many other leagues and conferences). An offshoot from his specialty of "optimization," Dr. Nemhauser delights in the task, no doubt due to the fact that he is a hard-core lifetime baseball fan (the Yankees at that). What a delight it was to listen to him couple his boyish enthusiasm with his professional specialty. I was struck by his ardor for the game notwithstanding his appreciation that every odd road trip or scheduling glitch is, in the mind of the fan, totally his responsibility.

I am with Dr. George Nemhauser who has been nice enough to be interviewed. You grew up in New York?

Grew up in New York. I grew up in the Bronx.

Near Yankee Stadium?

Right.

Did you go to the ball games when you were little?

Of course, many. Got in for free lots of times.

You went with whom?

Friends. My father was not a baseball fan at all. I had a couple of uncles who use to take me to the Polo Grounds and to Yankee Stadium.

Other people in your family were sports fans?

Two uncles. My father had no interest whatsoever.

When had your father gotten to New York?

He was born in the early twentieth century in New York City.

Did you have siblings that were interested in baseball?

Mildly so, my younger sister. She used to come with me Saturday mornings to get the autographs. We used to walk down to Yankee Stadium. It was about a 20 minute walk and I was probably 12 and she was 7 and the players kind of looked at this little girl and she was the best autograph getter in the lot, so…

Did she get them on balls or paper?

Paper or on the old picture cards that we used to get in bubble gum and stuff like that. I had a great collection, a great album. Of course I lost interest in it when I got to be about 14 or 15. It was years later when I realized that these autographs I had were an incredible collection of Yankee autographs, among others, including Joe DiMaggio. It was about 50 years after when I realized that, gee, this might be worth some money! I called my mother and said "You know where that album, the autograph album is, don't you?" She said, "Well, oh yeah, I gave it to cousin so and so about 10 years ago" and I've never seen it again.

There are a lot of stories that are just like that.

I am sure.

Do you remember any particular ball games that you went to?

Well, certainly pretty much every July – you know, they used to play double headers in those days and a lot were day

games and so the Yankees would surely have a double header either on Memorial Day or July 4th. I'd get there and sit in the bleachers. The bleachers were 50¢. I'd get there about 10:00 a.m. and hang out for more hours than you can imagine. First, by the players' entrance to get autographs and then go in the ball game. Occasionally we would get up enough money to go for the general admission in the grandstands and that was a buck and a quarter. I remember a game where Johnny Pesky was thrown out at home plate. I don't remember who the outfielder who threw him out was, but this was a single with the bases loaded into the outfield and Pesky hesitated on third and they threw him out at home plate and that ended the game.

I don't think I have ever seen that.

I once went to a game at the Polo Grounds where Johnny Antonelli pitched for the Giants. I think he pitched like sixteen innings.

When you went to the Polo Grounds or Ebbets Field, you went on the train?

I never went to Ebbets Field. In fact, I've never been to Ebbets Field in my life. Brooklyn was a huge distance away. The Polo Grounds was not far at all. You'd go on the subway.

You liked going on the subway?

Sure.

What are your memories of that ballpark?

Well, I have a great memory of the Polo Grounds. I was a huge Yankee fan and still am. Do you remember the Polo Grounds at all? Centerfield was about five hundred feet out there. It was where Willie Mays once robbed Vic Wertz in a World Series game.

Yes he did.

At both Yankee Stadium and the Polo Grounds, they had these things called "school days." Afternoon, during the week games, kids could get dismissed from school early and go to the games. So I went to such a game at the Polo Grounds once and besides getting autographs before the games, after the games they would occasionally, if they had bats that were slightly cracked, the guy (whatever you call him, the supervisor in the dugout) would occasionally throw out a bat and kids were aware of that and so we would go down to the dugout. They used to let you on the field and we would go down to the dugout and wait until they tossed out a bat. I wasn't the biggest kid in the world. I was probably about 12 and this bat comes out and a whole bunch of kids dive for this bat and I am on the fringe and all of a sudden some large attendant comes over and throws all the kids off the bat and while I am scrambling, he grabs the bat and he hands it to me. I was just standing there politely or something, but then I had to walk, essentially from the dugout, because the only way you could get out from the field was to walk out through that exit in deep centerfield and so you could imagine I am hanging onto this bat. Kids come up to me and say "Hey, let me see that bat" – "Let me take one swing with that bat" – you know. I am holding onto this bat for dear life. I got out of that stadium with the bat. We used to use that bat for hitting fungos.

Taped it up.

Taped it up and hit fungos and at some point it split. It was a Whitey Lockman special.

Did you play ball when you were young?

Oh sure, sure.

In organized leagues?

No, you see – at that time kids made their own leagues. It was amazing. I think we learned so much in those days. We would form our own teams. We would sell raffle tickets to buy jackets and we would arrange for our own games. No, I did not play any organized ball. I was a low substitute in high school basketball.

So you played baseball whenever you wanted to?

Exactly.

And you played whoever was there?

We played whoever was there.

It would be a lot easier if you could do that today.

That's right. But even until I left New York City, Sunday mornings, out on the playground, which was between where I lived and Yankee Stadium, it was not a grass field, it was a paved field. There were pickup softball games. The first 18 people down there. Then there would be a coin flip and two guys would choose up the 18 guys and by the 4th inning you would have 9 more guys there who would be the next team. So, I used to play those softball games until I was in my early 20's except those were Sunday morning games and in my late teens Saturday night was not the time you got home early. I was the catcher.

You must have listened to the Yankees?

Mostly, the Yankees' Mel Allen. Red Barber was the Dodger's announcer. Russ Hodges was the Giants' announcer. All these wasted brain cells. I remember all that stuff.

Oh, I loved Mel Allen. "It's going, going, its gone." He was a Southerner from Alabama.

All the great announcers from that era were Southerners.

That's amazing, Barber was, Mel Allen was, Harwell was.

They were just all storytellers.

Probably one of the very best memories I had as a kid was walking near the stadium. There were some public tennis courts and I was about 14 when I started playing tennis with a friend walking down to the courts. We were walking in one direction and coming in the other direction was Casey Stengel and that was really exciting. It was the year that Billy Martin was a rookie. So, I remember we stopped and we said, "Hi, Casey" and he said "Hi, kids" and then he started talking to us about Billy Martin. He loved Billy Martin as a rookie. Billy was all hustle and enthusiasm.

Did you read about the games in the paper?

Oh sure.

Mostly in the New York Times, I guess?

No, sorry my family wasn't up to the New York Times. It was mostly the New York Post during those days.

Who were your favorite players growing up?

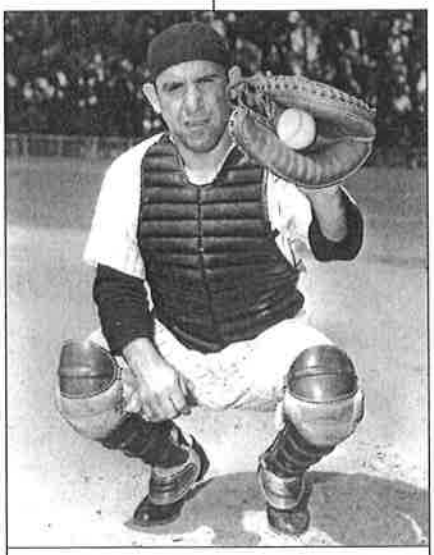
Well, I absolutely loved Yogi Berra and I would say that he was my favorite player. He was also fun. If you were sitting in

the bleachers when Yogi might not be actually playing, he was catching the pitchers warming up. You could carry on a conversation with him during the whole game. He loved to talk to the kids.

You had those special memories of players that had just come back from the war. Baseball was sort of a healing process, I guess in '46, '47, '48 as well.

I really started being a fan pretty young and so in my first year of being a fan I remember the Yankee outfield being Cliff Mapes, Johnny Lindell, and I am embarrassed for you to know how much I know here, you know, George "Snuffy" Stirweiss, American League Batting Champ 1945. I think he hit .309.

If you could hang on to a Chipper Jones forever as a Brave, that's fabulous, but so many players today are not interested in that aspect of the sport. Duke Snider was a Dodger and Willie Mays was a Giant. Sandy Koufax was a Dodger. I think that makes them even greater perhaps than they ever were.



Yogi Berra

There is another aspect to that. In the first place, they were not accepted as real stars. They were not really making a lot of money then and so those players... I knew where a bunch of them lived. They rented rooms in lower middle-class neighborhoods around Yankee Stadium, players who were pretty good players like the relief pitcher, Joe Page. He had a room, you know, in an apartment just a couple of blocks from the stadium and so did many of those guys. Those guys used to shoot pool in the local pool hall right by Yankee Stadium. It ain't like that anymore. The money has changed things. When I used to go down for autographs all the time, the one player who was very hard to approach, and he got out of his taxicab and the cops would line both sides so that he could walk right through to the player's entrance, was DiMaggio. Others just walked over from where they lived.

DiMaggio would sometimes while walking through that line sign a couple of autographs but it was really hard and you had to be lucky, but I got him.

When you came here, part of your deal with coming to Tech was that you had to get basketball tickets?

That's right Bobby Cremins and I grew up two blocks apart in the Bronx.

He was a great coach for Georgia Tech. Now when did you first get interested in scheduling all these things?

A couple of years after I got here, well, let me give you some background on this. The year after I got here, Joe Petite who had been the President of Tech, died and, of course, Tech was looking for a new President. Joe was the guy who really put Georgia Tech on the map as a research institution. He was followed by a fellow by the name of Pat Crecine. Pat had been provost at Carnegie Mellon and actually works in a field allied to what I do and I had come from Cornell. I really became quite close with Pat. Pat was a change engine. He really had some big ideas about how Georgia Tech needed to be reorganized. In about the second year he was here he set forth to really do some major reorganization of how the college was organized and he asked me to help run this reorganization for him. The faculty was incredibly resistant. The ideas were great but it was a bloody battle and when we finally prevailed, Pat said to me, you know, "Unlike in a business or something like that where you can get a bonus for having taken a year out of your life, I can't do anything like that in a university, but I do owe you something.." He said, "What would you like me to do?" And I said, "When the next seat comes open in the Athletic Board which is half faculty, I would be happy to have a seat on the board." So, the next year I had a seat on the board and a couple of years after that I became Georgia Tech's faculty representative for athletics which just ended this past year and which I enjoyed thoroughly.

After probably my second or third or fourth year, Fred Barakat was the Associate Commissioner for the ACC and was responsible for doing the scheduling, and they did it by hand. Pretty simple thing. You didn't have to change much from one year to the next and if in this year Duke played its final game at North Carolina, next year North Carolina would play its final game at Duke, simple stuff. The television contract started growing and we were getting pressure from television to deliver games at the right time and so on and Fred was sitting in a meeting and he said, "Guys, I don't know what to do. I can't get you a schedule that will please the TV guys and also satisfy our coaches." So, we talked about it a little bit and Fred said "There is no way. I don't know what to do." I said, "Fred, look, I do all this work with the airlines in terms of scheduling and let me see if I can help you out." And so that's how it got started.

How did you get to Major League baseball then?

That is another story altogether because our group of four people does this scheduling work. Three of us are partners and the fourth person, Kelly Easton, does all the work. She got a Ph.D. here about five or six years ago working with me and the title of her Ph.D. thesis is "Sports Scheduling" and so Kelly actually does most of the grunt work now. It is a great job for her, a mother with three young children. She can do work at 2:00 in the morning or whenever she feels like doing it.

When I got started, there was another guy who had gotten a Ph.D. just as I was coming here about '85 or '86 by the name of Mike Trick. Mike had gotten an assistant professorship

at Carnegie Mellon in their business school and he was teaching an Executive Masters kind of course and there was a guy in the course who was a VP of the Pirates or maybe former VP who said "My gosh, the stuff that you do might be some help to us." So, Mike started dabbling a little bit with the Major League Baseball scheduling and I knew that, so when I started the ACC stuff, he and I got together and we were working together and for a while we were just doing back-up work for Major League Baseball. You probably read about this couple from Connecticut that did the scheduling for years but it got too hard for them.

So, when you look at the box scores, do you pay attention to the rain delays and things like that now more than you pay attention to the statistics?

Not really. The list of constraints is huge. There are requirements in the schedule that say that you could only play for twenty consecutive days max and you must have a day off. So, when you look at their day off situation, it is what provides for the rescheduling and, frankly, we have nothing to do with that second phase of scheduling.

A constraint would be that you have to have a double header on Memorial Day, for example.

Yeah, yeah…

In a certain city or…

That might be good, that might be good. I don't think it would make it any harder.

Scheduling, I guess, is progressively harder with more and more teams moving around and simply having more teams around.

That's what makes the baseball thing. What distinguishes it from any other schedules that we do or we try to do, like the NFL. What makes baseball so different is the size. It's just overwhelming. I mean, that's what the largest complexity is there. On the other hand, you know, the leagues refer to their games as inventory and you have to have the right inventory on the right days.

That's less required in baseball because the season stretches out for so long, you have so many more teams playing. You know, if ESPN is doing a Sunday night game, probably one or two games are going to be good games that they can choose from. On the other hand, if they don't have that good *Monday Night Football* game – that contract is now $3 billion dollars is what the NFL gets from TV. If they don't have a good Monday night game, they have problems. In football, the size is not so great, but the focus on the matching of the games and dates is harder than it is for baseball.

Does the uneven schedule in baseball cause its own problems since some teams like Atlanta – which one goes to the West Coast once a year to play the West Coast teams – seems to play the Marlins like every other weekend?

The League is so unbalanced. The divisions are not of the same size and so the different divisions have different requirements. It's very complex in that way. I mean, one thing the league doesn't like is occasionally you will see… I mean, basically the way we do the baseball schedules we literally don't schedule it game by game. We schedule series and we go into the next level of detail and turn a series, into two, three or four games. We start by scheduling series. You will see in schedules, you will see a home stand, so a home stand is a collection of series, right? You will see occasionally a one-series home stand or maybe you will see a four-series home stand and baseball doesn't like that. So, that is one of the things that you try to do to keep as low as you possibly can, but there are so many objectives and that really makes the sports scheduling thing harder and different than lots of other optimization problems that I work on.

You need to get a good articulation of their objectives and so the way this field that I work in, starting in the '60s called "optimization," turns a real problem just as you did in high school algebra into a mathematical problem.

You turn a real problem into a word problem that is then turned into a mathematical problem. If you look at some of the other work we do in industry, you can articulate precisely the objectives. We want to maximize profit but we have limited resources. We have constraints on those resources and so on. Some of the constraints you can articulate very well but some you can't and there are trade offs. You are stuck with some stands of one series and some stands of four series. Which of those two do you prefer? Those are the kinds of things they have a huge difficulty in articulating and so you wind up running solution after solution.

✯ I THOUGHT WE HAD A DAMN GOOD CITY BACK THEN BEFORE PROFESSIONAL SPORTS.✯

Do you schedule Georgia Tech baseball?

Yes.

You schedule most of the ACC now, most of the major sports?

Yes, we do lots of other conferences, too.

How do the colleges release the schedules?

They don't release the whole schedule because if you release the whole schedule someone would say, "Now, look, what you are giving me is fairly reasonable but how come they got it better?" and so the actual teams will only get their own schedule and have a chance to comment and they may find something that they are really unhappy with and we go back to work again. But they don't release the whole schedule to the teams until they get an okay from each team on their schedule and that's it. Once you got an okay from each school on its schedule – boom.

I'm out of questions. Thank you for your time.