To Win The World From Schenectady

25th anniversary of the last W2PV contest operation

Matt Power, KA1R and Doug Grant, K1DG

"W2PV is considered to be a good brave fast moving guy" - OH2BH, 1976.

When you hear the callsign W2PV, what do you think of? Maybe it's the Yagi Antenna Design book. Maybe it's one of his designs in particular – the "PV4" four-element Yagi design. Or a multi-multi from days gone by. Or one of those callsigns in the Contest Hall of Fame. In recognition of the 25th anniversary of the final contest operation from the Schenectady, NY home of Jim Lawson, W2PV, we'll look back at the W2PV era, discussing Jim's contributions to radio, the design and operation of his multi-multi station, and some details of contesting in 1981.

Born in India to missionary parents, Jim had been deeply involved in radio for many years before beginning contest operations. On the ham radio side, he was licensed as W9SSP when in college in Kansas, and licensed as W8QUI when in graduate school in Michigan. Professionally, Jim was an expert on microwave communication. During World War II, he worked at the M.I.T. Radiation Laboratory as one of the principal researchers on the development and application of radar. The laboratory employed several hundred persons; Jim was one of the few dozen group leaders. He headed "Group 44," the Experimental Systems group, which was part of Division 4 (Research). After the war, the Radiation Laboratory made a public release of much of its scientific and engineering achievement in the form of a book series. Jim co-authored one of the books (*Threshold Signals*, New York: McGraw-Hill, 1950), a highly technical presentation of circuit and system theory. Ten years ago, *The Invention That Changed The World* by Robert Buderi (New York: Simon & Schuster, 1996) appeared in the popular press. It highlighted one of Jim's contributions to radar: the first successful TR switching. The book introduces the problem (p. 102-103) as "In the Rad Lab's early days, project leaders would diagram the key radar components on a blackboard - antenna, receiver, pulser. When it came to the vital transmitter-receiver (switch), however, they simply drew an empty box labeled TR. No one knew what belonged inside." As a result, most early microwave radars used separate antennas for transmitting and receiving, which made the systems unwieldy. As the book notes, Jim had the skill and passion to complete the system:

Jim Lawson, one of the few lab members with a strong background in amateur radio, jumped on the problem. "If we had been paid in proportion to our contributions to the success of the first microwave radar program, Jim Lawson would have earned more than half the monthly payroll," Luie Alvarez once asserted. Unusually gaunt, with a skull-like face marked by deep-set eyes and an extremely high forehead, the University of Michigan Ph.D. was a topflight experimentalist who burned like a fire to solve problems. And the duplexing question struck him as irresistible.

Even before the lab's first rooftop success, Lawson gathered a small rooftop crew to address the issue. Within a few weeks, the team had managed to fashion a TR Box by using a klystron as a buffer between the crystal and the transmitter. On January 10 a slightly less cumbersome rooftop apparatus employing a single paraboloid sprang to life, once again detecting echoes from the Boston skyline. DuBridge, in Washington for a Microwave Committee meeting, happily received a cryptic telegram announcing the event: "HAVE SUCCEEDED WITH ONE EYE."

… The plumbing that ferried signals between the transmitter-receiver and the antenna amounted to little more than homemade beaded coaxial lines, albeit with a touch of Lawson elegance.

The book's last mention of Jim Lawson (p. 117) refers back to both his appearance and his accomplishment, calling him "the cadaverous TR box architect."

Jim remained interested in research throughout his life. After World War II, Jim became a career employee of General Electric, holding a series of research positions leading to Vice President for Research and Development Planning at he corporate headquarters in Schenectady, New York. He settled on three acres in suburban Schenectady County, New York (in the town of Niskayuna), with his first wife, Jane. In addition to his amateur radio hobby, he was an avid skier and hiker, and possessed an encyclopedic knowledge of classical music. He also owned a small boat named "L's Belle", a play on his favorite exclamation "Hell's Bells!"

Jim's most widely known research topic relating to amateur radio was the Yagi antenna, which resulted in several 1979-1980 articles in *ham radio* as well as the book *Yagi Antenna Design* (Newington, CT: ARRL, 1986). One of his findings on Yagi design was the direct result of an antenna deployed for his multi-multi station. Specifically, he observed that the Wilson 3 el. 40M Yagi had particularly poor performance. Jim decided to make substantial changes based on his calculations showing that element taper had a major effect on correct element length. Once the antenna was back up with its new dimensions, the W2PV signal on 40 was regularly the best on the band.

After Jim retired from GE, and had completed the Yagi article series, he turned his attention to another challenging problem – phase noise in receivers. He began by placing an large order (on the order of $50,000, which was approximately four times the average starting salary for an engineer at the time!) with HP for spectrum analyzers and precision signal sources. This drew the attention of the local HP sales office, which was not accustomed to delivering such large orders to residential addresses. The local sales engineers dropped by to find out what Jim was doing, and his experimental setup led to several seminal application notes on phase-noise measurements published by HP. Sadly, Jim never was able to complete his work in this area.

By the early 1960s, Jim had become a highly competitive DXer. One of his contacts from this period (with one of his earlier callsigns, WA2SFP) can currently be found in the JA1LZ online log for May 1, 1962. Jim soon became a perennial top entrant in single-operator all-band DX phone contests, possibly a surprise to those who remember only the multi-multi operations. The single-op efforts started in the mid-1960s and continued until the early 1970s. For example, Jim had a first-place USA finish in CQ WW Phone 1971, edging out Chuck Cullian (now K0RF) 1.36M to 1.33M. In CQ WW Phone 1972, Jim dropped to third, behind Gordon Marshall (W6RR) and Bob Ferrero (W6RJ). The next year, W2PV switched to the multi-multi category for CQ WW Phone and finished first in the USA. 1973 also brought a W2PV multi-multi entry to CQ WW CW, but one with only 70% of the point total of the winner (W3AU). By the next year, however, the multi-multi CW score was getting very close to the top (W2PV 3.34M versus W3AU 3.62M). Most of the operators from this 1974 CW contest are still active today: their current callsigns are K1AR, K1BW, K1DG, K1OME, K1RX, K1ZM, K1ZZ, K2TR, and WA2SPL. Operators at the early multi-multis recall hearing Jane Lawson practicing piano in the living room, and being a gracious hostess, cooking for the crew.

Although Jim's primary interests were the CQ WW DX and ARRL DX contests, the station was also occasionally used for other contests, notably the single-op ARRL Sweepstakes entries by

John, K1AR, and Dave, K1ZZ. Another aspect of Jim's ham career, one that differs from the great majority of owners of large contest stations, was the frequent non-contest activity. Jim was generally on the air every morning, working phone on the highest open band. A typical 10-meter QSO was sometimes roughly like:

> [Jim] G3ABC, thanks for the call. You're 59. Name is Jim; QTH New York. Running a hundred watts. How copy? W2 Papa Victor.
>
> [G3ABC] Jim, you're 40 over S9, peaking 50 over. You have the best signal on the band and I think the strongest stateside signal I've ever heard. When you said 100 watts, I was absolutely floored. You have an outstanding signal here!
>
> [Jim] The antenna is 10 over 10; go ahead.

K1VR recalls hearing a station in the Pacific working by call areas one morning on 20 meters.

While a pileup of W1s were calling, a loud burst of noise came on the frequency. The DX station stopped the pileup and asked “What was THAT?!? It was 30 over 9!”. A somewhat embarrassed Lawson said “Oh, excuse me. I had to sneeze and forgot I had the VOX on. I’ll wait my turn. W2PV.”

Jim went through considerable effort to keep in touch with the operators of the multi-multi station. He joined the Murphy's Marauders contest club in 1974. Club meetings were typically on weekday evenings near Hartford, CT and Jim would regularly drive down from Schenectady to attend. In later years, Jim would rely on one of the station operators to be the primary coordinator of multi-multi operation planning and recruiting. At first, this was Fred, K2TR. Fred, however, eventually built a multi-multi station of his own, so the coordinator role was passed along to others including Andy, N2NT. The early 1980s were a time when several persons operated at W2PV for the first time. This occurred, in part, because earlier W2PV operators either built large stations of their own, or became primarily interested in single-op entries. Jim was a member of the Yankee Clipper Contest Club (YCCC) from the very beginning of that club, and most operators were from YCCC. (At present, W2PV is a YCCC club callsign but is not frequently activated.)

The OH2BH quote at the beginning of this article is a tribute to this approach for recruiting the operators. Jim knew the importance of having excellent operators at his station, and the PV operators' reputation spread quickly. In a September 1976 article in *CQ* magazine, OH2BH predicted the future of computer logging. He suggested entering a code to denote how the exchange should be sent for stations worked. He used the following illustration:

So, when a station is calling you, just type in the call and an applicable command like 'W2PV 14Z'... that instruction means that W2PV is considered to be a good brave fast moving guy who will realize the quickest possible message at once. '1' stands for quick report, '4' for quick confirmation, and 'Z' means the highest speed.

When you hear W2PV giving you 59905 you just type in 05 and start command for message number 4. That means that 05 goes only to the computer and confirms that complete QSO data can now be entered. The message number 4 confirms the same thing to Dr. Jim Lawson, W2PV.
(from Laine, Martin, "How to make a contest more fun," *CQ*, September 1976, p. 21.)

Heading into the fall 1981 contest season, the premier station in the CQ WW multi-multi category was N2AA, operated from the property of Buzz Reeves, K2GL, in Tuxedo Park, NY. N2AA had finished first on both modes in 1978, 1979, and 1980. W2PV was hardly a multi-multi underdog, though, having defeated the Tuxedo Park station, and finished first, in a few other recent contests: ARRL DX Phone 1979 and both modes of CQ WW 1977. W2PV also had other first-place finishes in contests where the Tuxedo Park station was inactive: ARRL DX Phone 1976, 1977, 1978, and 1981. Other N2AA victories included ARRL DX CW 1979 and ARRL DX Phone 1980. The only other stations with a CQ WW or ARRL DX first-place multi-multi finish in the past five years had been N3RS (three times), W4BVV (twice), K2UA (once; licensee is now W5KU), and W7RM (once). Other frequently high scoring multi-multi stations of this era were K3WW, W3AU, W3FA, W3MM, K5RC, N5AU, and K8LX.

The following table shows an antenna comparison as of roughly 1981.

Band	W2PV	N2AA
160	Inv. V @170'	Sloper @200', Inv. V @180', Inv. V @100'
80	2 el. delta loop @160', dipoles	3 el @195'
40	3/3 @180/90'; 3 @85'	3 el @120', 3 el @120'(S), 2 el @90'
20	7/5/5 @150/100/50'; 6/6 @106/42'	6/6/6/6 @200/150/100/50'(EU); 6/6 @120/60'; 6 @80'
15	8/8 @99/49'; 4/4(S)	8/8 @90/45'(L-EU); 8/8 @90/45'(JA); 5/5 @90/45'(S); 5 @70'; 6 @80'(EU)
10	10/10 @91/57'; 6/6 @70/40'	10/10 @60/30'; 10 @60'; 10 @60'(EU)

There was sometimes a difference in which station had the advantage on a band, e.g., N2AA on 80 and W2PV on 40. For the most part, relative signal strengths had a strong dependency on propagation conditions, even varying from opening to opening within a weekend.

At the end of October 1981, based on claimed scores, it appeared that W2PV had narrowly defeated N2AA on phone, breaking AA's three-year CQ WW winning streak (this was later confirmed in the final results: 10.6M to 10.4M). The challenge now was CW, traditionally the poorer mode for PV. By mid-November 1981, the W2PV CQ WW CW operation had settled on this group of operators:

160: K1NQ (then KC1Q)

80: K2SX

40: K1JX

20: K5RT (then WA3ZAS), K2XA, KA1R

15: N2NT, K1DG

10: WA2SPL, K3UA

Also important to mention is the effort of Everett, AJ1I (now a Silent Key) on 2 meters. Digital communication for spotting hadn't yet been developed, but multi-op DX contesters were typically active on 2 meter FM repeaters that were reserved for spotting during the 48-hour period. Everett collected spots of new multipliers announced by members of the Schenectady Amateur Radio Club, and relayed them on the 11-meter CB “intercom” to the appropriate band.

Another secret weapon at the PV station was Jim’s wife, Molly. A year or two after Jim’s first wife passed away, Jim married Molly, who had worked in his department in GE, and had spent many hours typing contest logs from the handwritten originals. Molly made every operator feel welcome, always made sure the crock pot of Contest Chili (or Stew, or Curry) was full and fresh. One operator recalls arriving at the station for one contest suffering with a head cold. Molly provided him with orange juice and aspirin faithfully every four hours all weekend.

All of the stations, 160-10 plus 2 meters, were tested and ready at least an hour before the 7 PM contest start on November 27, 1981. The only substantial problem was fixed shortly before the contest began. Here's a description of what happened, written by Dennis McAlpine, K2SX.

I was sitting down at the 80 meter station several hours before the start of the contest and tuning the band. The main antenna was a switchable 2-element wire quad with the apex at about 160'. After trying the antenna in several positions, I felt that it was not performing very well. I went over to Jim and told him my concerns. He listened to the receiver for a few minutes and then went to a large set of notebooks. After searching for a few minutes, he selected one of the notebooks and turned to a page in the middle of the book. He then took out a VOM and made several measurements somewhere on the antenna connection, checking them against the notebook. After a few minutes, he looked up and said, "Well, the problem is that the relay on the driven element is stuck in the SSB position and the antenna is out of tune in the CW band and is not performing like a gain antenna."

By then, it was only about an hour before the start of the contest. It was dark out. It was snowing out. It was freezing out. But, never fear. Intrepid climber, Andy, N2NT stuck a jumper cable in his mouth and climbed to the top of the 160' tower, reached out onto the quad and bypassed the relay. After he climbed down, I checked the antenna and, sure enough, that was the problem. The antenna was now performing like it was expected to. And, it did so for the entire contest.

As of 2006, we could not readily obtain the 1981 CQ WW CW log, but here is an example of hourly rates at W2PV in another 1981 contest: ARRL DX Phone, operated by W2PV, K1AR, AJ1I, K1OME, K2EK, K2NG, N2NT, W5OV (then WA2OVE), WB3ANE, W3AZD, K3LR, and K3UA.

UT	160-Sa	75-Sa	40-Sa	20-Sa	15-Sa	10-Sa	160-Su	75-Su	40-Su	20-Su	15-Su	10-Su
00	1	13	25	80	94	38	0	4	4	26	69	15
01	0	18	10	56	61	28	1	1	5	32	37	5
02	0	19	17	52	66	5	2	2	6	19	16	1

03	1	11	11	38	10	2	1	4	5	14	10	0
04	2	24	3	39	12	0	0	2	4	21	11	0
05	3	10	6	33	15	0	0	7	5	24	9	0
06	0	14	14	22	10	0	2	5	15	23	4	0
07	0	6	7	63	1	0	0	2	11	10	0	0
08	2	3	6	73	2	0	0	2	6	13	0	0
09	0	5	10	87	0	0	2	8	2	21	0	0
10	0	5	7	75	74	23	2	2	11	21	54	0
11	0	3	4	75	123	104	0	3	2	44	55	71
12	0	0	0	23	102	106	0	0	1	42	90	81
13	0	0	0	16	74	78	0	0	0	41	63	50
14	0	0	0	5	75	85	0	0	0	13	40	50
15	0	0	0	11	69	88	0	0	0	0	33	38
16	0	0	0	4	42	48	0	0	0	1	27	40
17	0	0	0	12	45	42	0	0	0	3	25	31
18	0	0	0	21	26	28	0	0	0	4	27	19
19	0	0	0	30	46	19	0	0	0	10	20	24
20	0	0	0	37	16	3	0	0	0	20	37	24
21	0	0	0	42	13	11	0	0	0	38	60	26
22	0	0	0	40	25	11	0	1	4	55	39	45
23	0	0	4	35	29	13	0	6	10	61	15	71
TOT	-	-	-	-	-	-	19	180	215	1525	1773	1323
DUP	-	-	-	-	-	-	0	13	0	132	47	53

NET	-	-	-	-	-	-	19	167	215	1393	1726	1270
MUL	-	-	-	-	-	-	14	72	74	138	142	126

Perhaps the clearest difference from current contests (or, specifically, ARRL DX phone contests) is in the QSO totals. In recent years on 10, 15, and 20, it's been common to have 50% more contacts than were ever achieved in the early 1980s. The change on the low bands is even more pronounced: it's possible to work about three times as many stations on both 40 and 75. In the early 1980s, 160 was not yet a very important band. Although the LORAN problem had mostly gone away, many fewer stations were active on 160, and fewer countries allowed 160 operation. Countries worked on 160 would typically be less than 20% of the 75M total, whereas the percentage nowadays is often close to 50%. Going back to the high bands: peak rates from stateside have increased dramatically. Back then, a 125 hour on phone was very good; currently, the best stations see double that.

The operating environment in CQ WW CW 1981 was similar to that in other years. The 160, 80, 20, and 10 meter stations were in the basement, and the 40 and 15 meter stations were in a small room upstairs, which also housed the huge W2PV logbook and QSL collection. The "In Memory of W2PV" article in the September/October 1983 *NCJ* has additional details about the operating positions. The equipment on most bands was a Kenwood TS-830S and an Alpha 77 (1 KW input), and K1JX brought his highly-modified Kenwood R-599 and T-599. For this operation, most of the state-of-the-art Signal/One transceivers normally used at W2PV were stacked neatly on the floor.

Jim was seldom around the stations that weekend. He was ill at the time and ultimately survived only a few months longer. One of the operators remembers hearing only three words from Jim during the contest. It followed a discussion of one station left unmanned when its band could conceivably have been open. Jim didn't offer an opinion on what should have happened. He simply said "Seize every opportunity."

By 7 PM local time Sunday, the outcome was essentially what is shown in these final scores (from October 1982 *CQ*, published by CQ Communications).

Top-two USA multi-multi stations:

Call	160	80	40	20	15	10	Score
W2PV	72/14/27	427/18/70	1101/30/103	1389/35/118	1228/35/103	1050/34/106	10,431,729
N2AA	49/12/15	461/21/70	803/26/85	1475/37/115	1314/35/113	1051/33/108	10,147,820

Quite unexpectedly, the list of the top-six world multi-multi stations ended up as follows:

Call	Score
W2PV	10,431,729

N2AA	10,147,820
W3LPL	9,628,026
OH3AA	9,301,635
K2UA	9,210,792
N9MM	8,884,400

W2PV had won the world – at least in the claimed scores. Jim health was failing (he died in the spring of 1982) and since the results weren't due to be published until October, an extraordinary gesture made it possible for Jim to know the official final outcome before his passing, as we'll see in the first of the following series of recollections. The stories here are from the perspectives of several persons who knew Jim at different stages and operated at the station.

Joe Krone, WA2SPL: That last contest Jim's health was failing fast and he knew he didn't have much time left. Every hour we would bring our full log sheets to the kitchen where Jim was laying down. He would visually scan them and if you did well you got a smile... if you didn't, nothing was said but you saw a wrinkled brow and knew you had to get back in there and do better for the next hour.

At the end of the contest we gathered the scores from the other "Big Guns" and headed to the kitchen were Jim was now showing the strain the contest had had on him. Someone gave him the scores and a HUGE smile came across his face as he realized we had actually WON! All he could manage was a weak "Thank you everyone."

Over the next few days each of the other multi-multi stations agreed to concede the contest to W2PV. CQ agreed to have the winner's plaque made immediately and a group of the operators presented it to Jim a few weeks later. He passed away soon after. He was a good friend, a true mentor and a wonderful role model to all that knew him.

Randy Schaaf, W9ZR: I moved to Schenectady in January 1972 and called Jim on the phone and arranged to have lunch. Over lunch I told him about the great experience that I had operating from the W4BVV multi-multi in the CQWW CW the previous November. A few days later he called to see if I would be interested in doing a multi-multi in the CQ WPX. He rounded up a few guys, ordered some new equipment, and we gave it a try. There were lots of gremlins that arose but we had a ball and he was hooked.

Here are a few of my memories from those early years:

1. The very first contest I was on 15 meters SSB at the start of the contest with the stack on JA and called CQ. Nothing could have prepared me for the wall of JA's that called at the same time.

2. Jim used Alpha 70 water cooled amps mounted above the Signal One transceivers in the early years. In the middle of a run the amp sprung a leak and the water started running into the Signal One below it. Not good.

3. Dave Donnelly (K2SS) and Fred Lass (K2TR) spent many, many days there erecting additional large antennas and towers. They were simply amazing to watch and have to be among the best climbers around.

4. Fantastic runs on 80 meters with Europe and the Middle East calling us made the band feel like 20 meters. This is not so unusual now but back then it did not happen very often.

W2PV was an extremely intelligent individual who used his skills to build a world class station that influenced the development of many contesters who operated from it over the years. I am sure that he would have been very proud to see what "his guys" have accomplished since his passing.

Saul Abrams, K2XA: I was sitting in the den with Jim during a break in operating and mentioned that I was going to build a 20 meter beam on a 40 foot boom using two 20-foot irrigation tubes. He asked how I was going to do it and I responded that I was going to use the "traditional" even-spaced elements that many had used before. Jim said that there had to be a better design and asked me for my proposed element tapers. A week later Jim called me on the phone and told me that he had some "new" dimensions that he had had just calculated for me. Thus was born the now-famous four element "PV-4" 20 meter beam, and its 15 and 10 meter counterparts.

Paul Blumhardt, K5RT: Jim's wife Molly was wonderful. She picked me up at the airport that cold November afternoon. 20 meters was amazing. Weak Europeans never stopped calling. In the middle of the night Saturday I remember NT and UA coming downstairs and the three of us getting a little silly. FR0GGL was active that weekend, and we nicknamed him "Frog Legs." Sadly, Jim couldn't eat by then and spent most of the weekend sipping on distilled water. I recall talking to him about water skiing in his younger days. It was a wonderful experience with some of my closest friends that weekend and I'll never forget it.

Dave Jordan, K1NQ: I remember that last contest just like it was yesterday. I was on 160, and we were just loud! I'm not sure anyone ever beat us in a pileup that weekend. I also spent time on the 20m station helping out on the mult radio and doing a few hours of afternoon running. What an amazing station. I will always remember that contest and talking to W2PV about antennas.

Mark Pride, K1RX: Some of my fondest recollections of Jim and Molly were the friendliness and the warmth this ham couple offered to each and every person that entered the house. I remember spending a lot of time on the big tower with K2TR modifying those 40M beams when Jim determined the lengths needed adjustment to compensate for the severe element taper.

Jim's engineering and book keeping was masterful. This set the vision of my own plan that would not unfold for another 15 years, building my own Multi-Multi station. He was truly an inspiring human being and he brought a level of professionalism to this hobby I had never experienced. He was my best mentor!

Clarke Greene, K1JX: I recall that K1AR got the position of recruiting agent for W2PV that season. Some time around the beginning of September John called me on the phone asking me what I had planned for the CQWW, then suggested that I think about operating at PV. Jim was quite ill and John wasn't sure if the Lawsons were up for hosting a mob of operators. John discussed the topic with them and they said they'd be happy to host a multi operation.

I operated on 40 meters for the CW weekend. About midnight of the first night K3UA asked if he could operate. He seemed anxious to get some operating in and hadn't so far because his band (10M) had been pretty much closed at the start of the contest. So Phil sat down for a couple hours and did really well, then decided that the band was closed to Europe so he came out and said he'd had his quota. I sat back down and a half hour later the JA's started coming through and the band got really good to Northern Europe. They kept calling until well after 12Z. Phil stopped by before he set off to his 10 meter position and I think I may have worked another 200 stations since he had gotten out of the chair. His jaw visibly dropped.

I think that CW weekend was the first time a USA station had ever worked 100 countries and 30 zones on four bands in the CQWW. W2PV did it on 40-10 meters. We may have also had 1000 or more contacts on those bands. We were all pretty thrilled. At the end of the CW contest I stayed upstairs with Jim while the gang went downstairs to get the scroes on 3830. I bet Jim that we had won, but he was really dubious. When we heard the yelling from downstairs, we knew I had won the bet. W2PV had the biggest smile on his face that I had ever seen.

Dennis McAlpine, K2SX: I have a number of recollections from that weekend. The first was walking into the basement station and seeing five Signal One transceivers stacked up in a corner as back-ups. I remember thinking that if that's the back-up, what is the primary rig? It turned out that most of the operators had chosen to bring their own TS830s that weekend, and the Signal One rigs just sat in a pile on the floor.

The second immediate reaction was seeing a guy sitting at a card table listening to the two meter repeaters as spots came through. His job for the entire weekend was to copy the spots and then pass them on to the appropriate operator by using a CB radio (one channel for each band).

During one of the slow periods, I took a closer look at the library of notebooks and spent some time talking to Jim. He had made enough measurements when things were working correctly that he could pretty much find anything that went wrong with any of the antennas, rigs, amps, etc. without leaving the shack. It was a great example of the type of engineering that went into W2PV. It obviously left a lasting impression on me.

Tim Duffy, K3LR: I visited W2PV twice. The first time was when I was 18. I drove my Father's station wagon to visit K1TO. Along the way WB3EUB and I stopped in to visit Jim and Molly. He was an incredible host and gave this young ham quite a tour. This left an impression on me that has driven me in my career and in my hobby ever since.

When I operated the ARRL DX Phone at W2PV in 1981, it was a dream come true. It was an incredible operation. I remember making pages of notes after the contest, all of which were used when I started construction of my own Multi Multi in 1987. All about details, all about the "Quality Operator Experience." I was fortunate to have K2TR purchase the W2PV receiver band pass filters from Jim's estate for my station. We still use them today!

Arranging to have Molly come to Dayton to receive Jim's Contest Hall of Fame award at the Contest dinner in 1993 was another important PV high point for me!

Andy Blank, N2NT: My first 48-hour single-op was at W2PV. I remember wo things fomr that contest: first was being amazed at how many stations I could work barefoot on 160 (amplifiers were not permitted on the band at that time), and begin so exhausted after the contest that I slept 15 hours. I remember sitting at the 15-meer station, which was upstairs, and seeing numerous pictures on the wall of mountain peaks. Then I noticed that Jim was standing on those peaks! He had been a fairly serious hiker and climbed some big mountains, including Kilimanjaro and the Matterhorn. Another time, K1DG brought a book from Jim's library over to show me, and opened it to page after page of very complex-looking calculus and schematics. Then he pointed to the author of the book - Jim Lawson! It was frankly a little intimidating to be around Jim, since he was so accomplished both professionally and in his hobbies, especially since I had not yet decided on a career. But I guess I redeemed myself by climbing the tower to fix the 80-meter quad at that last operation.

Martti Laine, OH2BH: Jim visited Finland in the 60's and gave our group strong inspiration and guidance to get our then treasured OH2AM off the ground. We built to Jim's specifications and soon our efforts were up to world-level multi-multi winning at OH2AM. He was a genius on antennas but also a strong supporter of young people toward serious contesting.

He designed and built antennas for contesting application! We often read his original book still and, for example, his chapter on stacking distance vs. F/B are rarely discussed in more recent books but are yet correct and most valuable findings.

Bill Poellmitz, K1MM: While attending Union College in Schenectady from 1970 to 1974, I participated in about half of the major contests from W2PV. My first job during contests was helping Jim update the band-by-band multiplier and QSO sheets that were taped to the walls. My first operating shifts consisted of listening on 10 meters when the band wasn't open, and calling "CQ Canada" on 80 and 40 meters during the day. By 1971 I had earned the right to share responsibilities with the more experienced operators, and shared 15 meters with K2SS and 10 meters with K2VV. Since I spoke fluent Spanish, I was also the one called upon when we needed to explain to some South American operator what the contest was all about, and convince him to give us the right exchange for our first Bolivia or Zone 12, and maybe move to another band!

In 1972, I was President of the Schenectady Amateur Radio Association (SARA). I was always impressed when I saw Jim Lawson and the crowds he attracted as he "held court" before and after the meetings. As soon as Jim started speaking about any subject, people were magnetically drawn to him, and patiently listened to his stories about everything from how the manufacturers should improve the efficiency of an 8877—to the physics behind calculating the effective height above ground for stacked Yagis. Jim always stayed and patiently answered questions until the last of the audience went home.