

Signature Identifications & Photographs Pier by Pier

— Miller Goss (March 2018)

The names are given as (1) Surname, (2) Exact form of the signautre in brackets [], location (e.g. E1-1 for pier E1 and side 1), and notes. Many individuals are still not known to us (marked by a ?). If you have notes for individuals (e.g. full name, affiliation, connection to Ron Bracewell, etc) please contact Goss (mgoss@nrao.edu).

The list below gives the signatures on each of the nine sundial piers, from 8 am through 4 pm. The tenth pier introduces the Sundial Plaza and is adjacent to the sole Stanford dish that we have. All photos are March 2018.

8am — Side 1 faces the center of the sundial. N4 (off the pad to the west); N4 is the Stanford designation, meaning the 4th telescope on the north arm.

9am — side 4 to the center – N1.

10am – side 4 to the center – E2

11am — side 4 to the center – E3

NOON — side 1 to the center – E1

1pm— side 4 to the center (our dish was mounted on this pier) – W1

2pm— side 3 to the center — S1

3pm— side 4 to the center — W2

4pm — side 3 to the center — N2 (off the pad to the east)

The 10th pier (not part of the sundial; near the dish) — W1

8 AM

Pier N4 (off the pad). side 1 to center

Side 1 8am

Frater [Bob Frater] N4-1. Roberts H. Frater . University of Sydney, CSIRO, Resmed.



Side 2 8am

Watkinson [Arthur Watkinson] N4-2. RPL colleague of Ron's and later Sydney Univer , Fleurs.
Eball [T. Eball] N4-2. ?



9 AM

Pier N1. side 4 to center

Side 1 9am

Biermann [Biermann]	N1-1. Ludwig Biermann. Germany, MPI , 1907-1986
Evans [J.W. Evans]	N1-1 John W. Evans. Sac Peak solar optical astronomer
Stebbins [Stebbins]	N1-1. J. S. Stebbins. optical astronomer. 1888-1966, Uni Wisconsin and Lick Obser
Strehan [Strehan]	N1-1. ?
Shane, C.D.	[C.D. Shane] N1-1. Lick observatory. Husband of Mary Shane (see W1) and father of Whitney
Shane, W.	[Whitney Shane] N1-1. Leiden later Nijmegen NL . See mother Mary Shane W1. C.D. Shane is father N1.
Ellis [G. Ellis]	N1-1. Univer Tasmania
Bowhill [Sid Bowhill]	N1-1 Univer Illinois, Elect Engineering
Newman [Newman]	N1-1. CRL (what is this), SRI – Stanford Research Institutue ---?
Smith [H.J. Smith]	N1-1 Univer Texas, McDonald Obser. Harlan Smith



Side 2 9am

Pierce

N1-2. John Pierce , Bell Labs and end of career at Stanford.

Whitford [Whitford]

N1-2 Lick Obser. A.E. Whitford.

Parsons [Parsons]

N1-2 ? Could this be S.J. Parsons of Stanley Hey's group



Side 3 9am

Righini. [Righini]	N1-3. Guglielmo. Arcetri Observatory Italy, top of pier; solar radio astronomy..
Luts-Doc	N1-3 ?
Wu Linda [Wu Linda]	N1-3 Chinese characters. VLBIer retired now Shanghai.
Wright [Wright]	N1-3 K.O. Wright. signature at an angle, Canada, DAO Victoria
Vitkevitch [Vitkevich]	N1-3. V.V. Vitkevitch. Moscow
Bacon [Bacon]	N1-3. D.C. Bacon. ? Stanford
Dewhirst [Dewhirst]	N1-3 David W. Dewhirst, Cambridge, The Observatories
Carter [Carter]	N1-3. Alan Carter CSIRO
Sphar [Clark Sphar]	N1-3. Stanford- first name is Clark__?



Side 4 9am

Kimpara, A..... [Kimpara] N1-4 Post WWII Japanese solar radio astronomer
Baldwin [J.E. Baldwin] N1-4, John Baldwin Cambridge, Cavendish
Minnaert [Minnaert] N1-4 Utrecht. M.J.M. Minnaert
Edmondson [Edmondson] N1-4 Frank. Indiana
Webster [Webster] N1-4, Hugh Webster, Brisbane
Somerville [Somerville] N1-4 Univer Armidale, J.M. Somerville
Hoffman [Hoffman] N1-4 -----?
Prentice [Prentice] N1-4 Brisbane, S.H. Prentice



10 AM

Pier E2. side 4 to the center

Side 1 10am

Swarup [G.Swarup] E2-1. Govind Swarup. Worked with Ron at Stanford FRS , GMRT etc.
Yen [J.L. Yen] E2-1 Allen. Toronto , radio astronomer. 1925-1993
Scheuer [Peter Scheuer] E2-1. Peter - Cavendish Cambridge UK.



Side 2 10am

Liston [C.S. Liston] E2=2, ? C.S. Liston CSIRO Stanford
BJE [BJE] E2-2 ?
Rose [Steve Rose] E2-2 ? Stanford
Jack [Jack] E2-2 chiseled at an angle . confirmed to be Jack Welch
Simon [P. Simon] E2-2 P. Simon. Paris, Almost perpendicular
Brown [H.E. Brown] E2-2 ? Pasadena
Newkirk [G. Newkirk] E2-2 Boulder Solar astronomer
Barber [Barber] E2-2 ?
HEGH [HEGH] E2-2 ?



Side 3 10am

Barker [JKB] E2-3 ?
Yang [K. Yang 1957] E2-3 Stanford, Illinois
Xiang Delin [Xiang Delin] E2-3 Chinese characters. Nanjing . mm astronomer. Known at NRAO
Spelman [Sandy Spelman] E2-3 Stanford ?
Zisk [S.H. Zisk] E2-3 Stanford planetary radar scientist. Chiseled signature underlined
Coates [Coates] E2-3 NRL – Robert Coates
Meyer [N. Meyer] E2-3 Copenhagen
Boischot [Boischot] E2-3 Paris, at 45 deg angle. Worked with Denisse
Houziaux [Houziaux, Leo] E2-3 Belgium astronomer, knew Ron at Berkeley- now in Brussels
Ho [I.Ho] E2-3 Stanford, key engineer on the project for radio heliograph
Lequeux [J. Lequeux] E2-3 James Lequeux known to many of us. Paris
Kazes [E. Kazes] E2-3 Paris Originally from Turkey
Moffet [Al Moffet] E2-3 Caltech



Side 4 10am

Schmidt [M Schmidt]	E2-4	Caltech. Done during 1961 IAU visit; discoverer of quasars
McVittie [McVittie]	E2-4	U. Illinois
Blum [E. J. Blum]	E2-4	Paris
Steinberg [Steinberg]	E2-4 Paris	RNB translated radio astronomy textbook by Steinberg and Lequeux



11 AM

Pier E3. side 4 to the center

Side 1 11am

Waterman [Alan Waterman]	E3-1 ?	might be Stanford – earlier NSF Director
Purton [Purton]	E3-1	? Is this Chris Purton from Penticton ?



Side 2 11am

Wood [Lloyd Wood]	E3-2 TOP of pier. AFOSR – Air Force Office of Sci Research
Priester [Priester]	E3-2 Wolfgang Priester , the astronomer from Bonn Germany
Lincoln [Virginia Lincoln]	E3-2 Atmospheric scientist , Boulder National Bureau of Standards
Clark [B. Clark]	E3-2 Caltech NRAO
Laffineur [Laffineur]	E3-2 M. Laffineur Paris-pioneer of French radio astronomy
Felli [M. Felli]	E3-2 Arecetri , Italy. Marcelo worked with Ron on the 5 element synthesis array
Fokker [Fokker URSI]	E3-2 A. Fokker Solar radio astronomer from Utrecht, “URSI”
Anastasiadis [Anastasiadis] - in Greek	E3-2 Mihalis A. Physics National and Kapodistrian , Atbon Allhens
Van de Hulst [van de Hulst]	E3-2 Leiden; predicted HI line
Drell [Drell]	E3-2 Sidney Drell. Famous Stanford physicist – SLAC and arms control expert
Cutler [Cutler]	E3-2 ?



Side 3 11am

Blank

Side 4 11am

Hirth [Hirth]	E3-4 top of pier- ?
Zirin [Hal Zirin]	E3-4 Caltech solar astronomer
Barcus [Barcus]	E3-4 ?
Allen [C W. Allen]	E3-4 Stromlo and then U College London. Clabon Allen
Drake [F.D. Drake]	E3-4 Frank Drake. NRAO Cornell and UC Santa Cruz and now Seti.
Fowler [Willy F]	E3-4 Willy Fowler the Nobel Prize in Physics
McCue [McCue]	E3-4 M. McCue Adelaide, -----?
Cohen [M.H. Cohen 4-65]	E3-4 Marshall Cohen. Cornell, San Diego and Caltech
Rickett [B. Rickett]	E3-4 Done in ~1974; UCSD

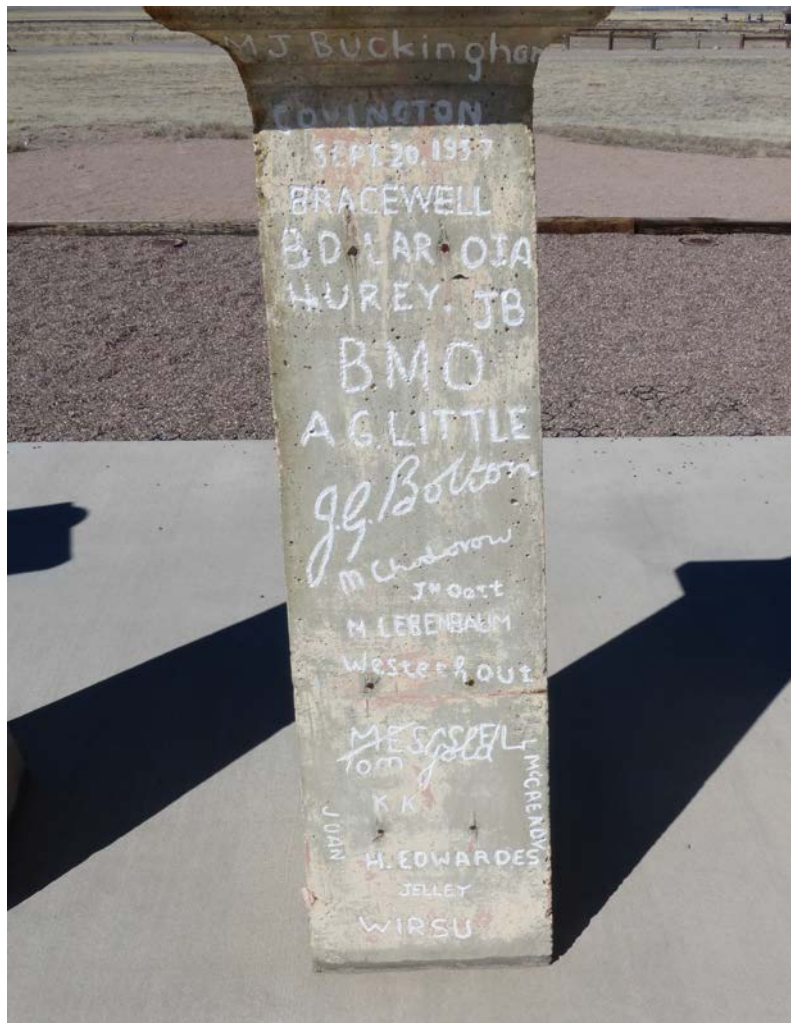


NOON

Pier E1. Central pier — side 1 to center.

Side 1 Noon

Cone [Cone] E1-1 ? Donald I. Cone.
Kerr [Kerr] E1-1. Frank Kerr CSIRO, U Maryland.
Buckingham [M.J. Buckingham] E1-1 U Sydney and Univer of Western Australia
Covington [Covington Sep 20, 1957] E1-1 Arr Covington Canadian. NRC. Solar radio astronomer,
Bracewell [Bracewell] E1-1 He added his signature to the most famous pier. Stanford, CSIRO
Laroia [BD Laroia] E1-1 India ----- ?
Urey [H.Urey] E1-1 Harold . Nobel Prize , UCSD
JB [JB] E1-1 stray signature ?
Oliver [BMO] E1-1 Barney Oliver Hewlett Packard.
Little [A.G. Little] E1-1 CSIRO and Un Sydney. Alec Little
Bolton [J.G. Bolton] E1-1 CSIRO, Caltech . best quality signature on the piers. Script –at angle.
Chodorow [M. Chodorow] E1-1 Marvin, Stanford Prof Physics.
Oort [J.H. Oort] E1-1 Leiden, Jan Oort perhaps the most famous signature
Lebenbaum [M. Lebenbaum] E1-1 Matt, Airborne Instrument Lab
Westerhout [Westerhout] E1-1 Leiden, U Maryland, US Naval Observatory
Messel [Messel] E1-1 Harry. Sydney Univer, on top of Tom Gold. This was a deliberate joke.
Gold [Tom Gold] E1-1 under Messel. Harvard ,Cornell
KK [KK] E1-1 Ken Kellermann from the 1961 IAU at Berkeley.
Edwardes [H. Edwardes] E1-1 famous left wing scientist from CSIRO
Jelley [Jelley] E1-1 John Jelley of Harwell. Married to Joan Freeman Jelley.
Wirsu [Wirsu] E1-1 O.L. (Les) Wirsu, formerly CSIRO
Joan [Joan] E1-1. Joan Freeman Jelley. nuclear physicist; married to John Jelley. Earlier CSIR
McCready [L. McCready - vertical] E1-1 Lindsay. CSIRO, one of original radio astronomers



Side 2 Noon

Piddington [Piddington]	E1-2 Jack. CSIRO. Bracewell text amazing.
Mestel [Mestel 1961]	E1-2 Leon, Sussex. Theoretician in astrophysics
Treharne [Treharne]	E1-2- RF Treharne, CSIRO, Weapons Research Establishment South Australia
Walsh [Dennis Walsh]	E1-2 Jodrell Bank
Minnett [H. Minnett]	E1-2CSIRO, Chief in the 1970s, major player in the Parkes telescope construction
Yabsley [D. Yabsley]	E1-2 CSIRO , WWII and post war
Mills [B.Y Mills]	E1-2 Bernie, CSIRO, Univer of Sydney
Yaplee [Yaplee]	E1-2 NRL, Ben , Naval Research Laboratory
Ginzton [Ginzton]	E1-2 at an angle, E.(Ed)L. Ginzton. Stanford, Varian
Gallet [Gallet]	E1-2 Roger, French, working in Boulder
Joseph [R.S. Joseph]	E1-2 CSIRO- on left hand side, ?
Mitra [Mitra].	E1-2 India, M.T. Mitra -ionospheric physicist, left hand side



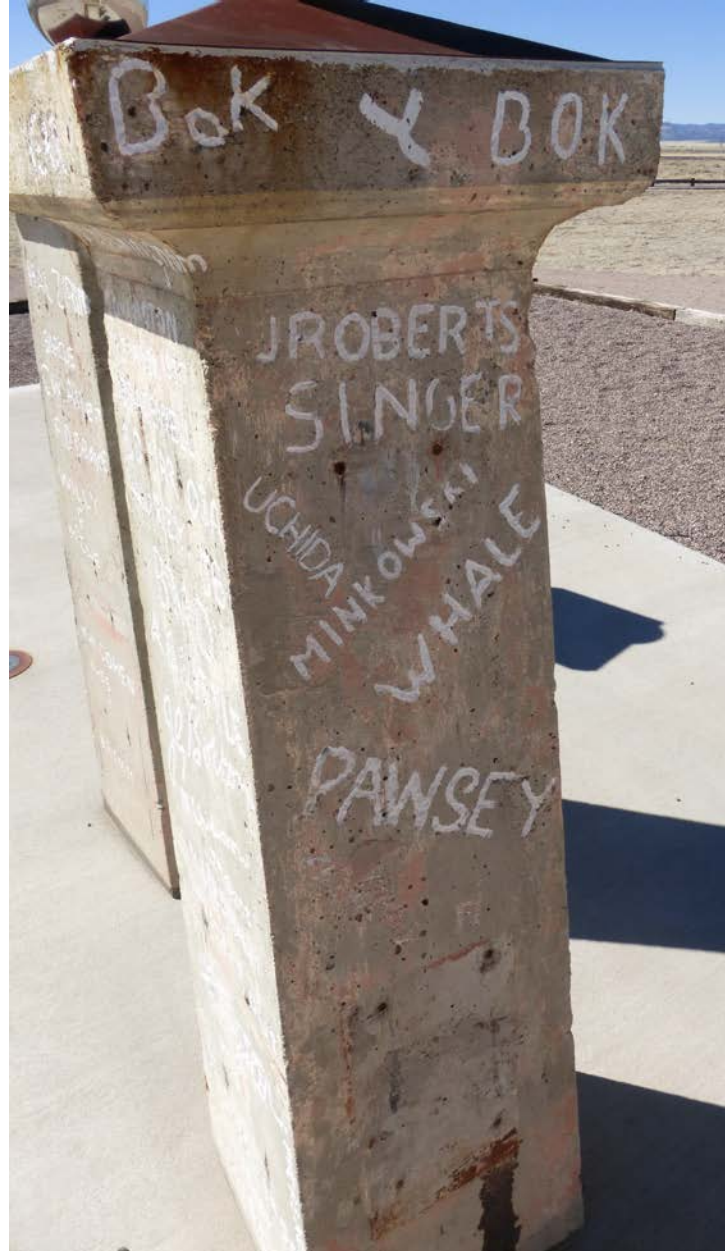
Side 3 Noon

Erickson [Erickson] E1-3 Bill Erickson, Univer Maryland, Tasmania, Leiden
Bigg [Bigg] E1-3 Keith, CSIRO , Cloud Physics, Io decametric bursts identification
Vakaney E1-3 ?
Christiansen [Christiansen 1957] E1-3 W.N. "Chris", mentor of Ron, Chris Cross inventor
Mathewson [Mathewson] E1-3 Don, worked with Chris and then Phd Jodrell, CSIRO, ANU
Lilley [Lilley] E1-3 Ed, Harvard
McClain [McLain] E1-3 Ed, Ron's text has the NRL rocket and satellite fiasco story, NRL
HTF [HTF] E1-3 initials of Harald T. Friis . Jansky's boss . In retirement lived in San Fransico
Brown [Hanbury] E1-3 RHB, Jodrell Bank, Sydney Uni, radar WWII, early radio astronomy
Maxwell [Maxwell] E1-3 Alan, New Zealand MSc, Jodrell, Harvard solar radio astronomer
Seeger [CLS] E1-3 Charles L. Seeger, Leiden, Stanford
Haddock [Haddock 58] E1-3 at an angle, Fred, NRL, Michigan
Murray [J.D. Murray] E1-3 at an angle, John Murray from CSIRO and Leiden
Roman [Roman] E1-3 Nancy, NRL and later NASA
Bowen [Taffy Bowen] E1-3 E.G. "Taffy" , one of the inventors of radar, Chief of Radiophysics CSIRO
Shakeshaft [John Shakeshaft] E1-3 John, Cavendish lab, Cambridge
Smith [Graham Smith] E1-3 Sir Francis G-Smith, Cavendish, RGO , Jodrell, Astronomer Royal



Side 4 Noon

Bok Bok [Bok y Bok]	E1- 4 Bart and Priscilla Bok,Harvard, ANU and Arizona
Roberts [J Roberts]	E1-4 Jim Roberts. CSIRO. Worked with Ron.
Singer [Singer]	E1-4 SF Singer," Fred". University of Maryland.
Minkowski [Minkowski]	E1-4 Rudolf , Carnegie Pasadena, later Berkeley. At an angle.
Whale [Whale]	E1-4 from New Zealand. Harry Whale. Ionosphere research. DSIR and Auckland Un
Pawsey [Pawsey]	E1-4 JL, CSIRO. Pioneer radio astronomer in Sydney
Uchida [Uchida]	E1-4 side pier. Yutaka Uchida-Tokyo Astron Observatory and High Altitude Obs



1 PM

Pier W1. side 4 to center (the dish now at the VLA was mounted on this pier)

Side 1 1pm

Weaver [H. Weaver] W1-1. Berkeley, Goss' thesis advisor
Radhakrishnan [V. Radhakrishnan] W1-1. RRI, Caltech, CSIRO
Wennersten [Wennersten] W1-1 AFOSR Air Force of Office Scientific Research- funding agency
Larenz [Larenz] W1-1 at an angle. ? Might be R. W. Larenz from Hanover Germany
Beer [Arthur Beer] W1-1 originally German and went to Cambridge Univer in 1930s
Hvatum [H. Hvatum] W1-1 NRAO
Swenson [Swenson] W1-1 George ,Illinois.
Burke [B.F. Burke] W1-1 MIT, Carnegie Institute of W., co discover of Jupiter bursts –Franklin N2-4
Evans [J. Evans] W1-1 MIT earlier Jodrell Bank, J. V. Evans
Livingston [W. Livingston] W1-1 NOAO Tuscon
Shane, M. [M. Shane] W1-1 Mary Shane- wife of CD Shane and the mother of Whitney- see N1-1
Kuzmin [A. Kuzmin] W1-1 In Cyrillic letters. Kuzmin was at Caltech circa 1963-64 visitor from USSR
Tovmassian [Tovmassian] W1-1 Armenian
Waynick [A. H. Waynick] W1-1 Penn State, Art



Side 2 1pm

Bunemann [Bunemann] W1-2 Oscar .Stanford, Birmingham ?
Wielebinski [R. Wielebinski] W1-2 Sydney Uni, Bonn



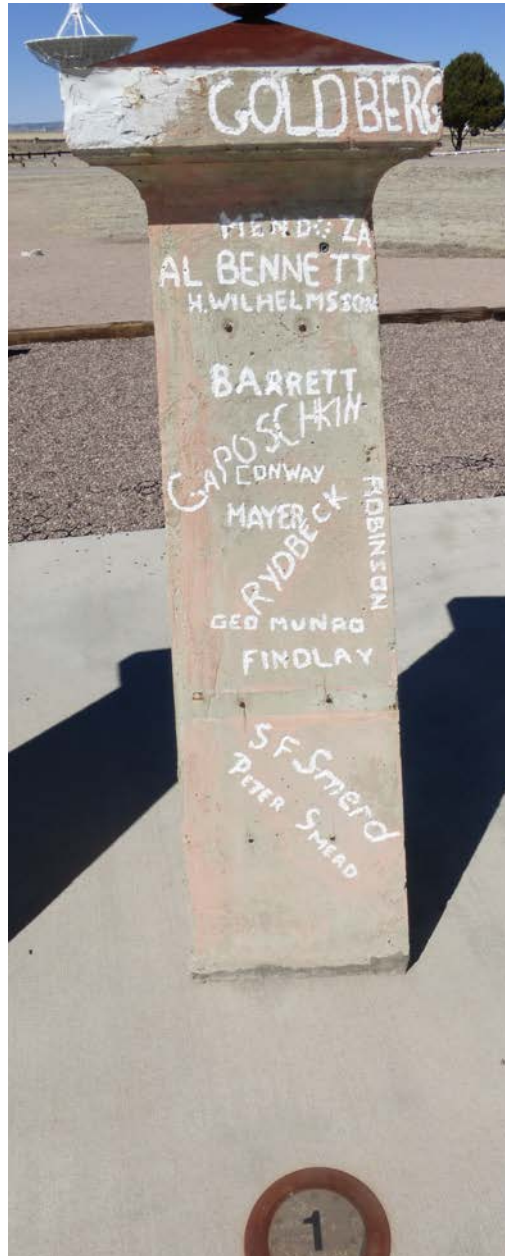
Side 3 1pm

Sturrock [PAST] W1-3 Likely Peter A Sturrock. Applied Prof Physics Stanford
Sweet [Sweet] W1-3, pecked- dot signature . William H. Sweet. Prof Surgery Harvard, AUI trustee



Side 4 1pm

Bennett [Al Bennett] W1-4.
Wilhelmsson [H. Wilhelmsson] W1-4 Onsala , Chalmers Sweden
Barrett [Barrett] W1-4 MIT ,Al Barrett
Gaposchkin W1-4 Curved signature of Cecilia- Harvard
Mayer [Mayer] W1-4 NRL, C.H. Mayer - Connie
Rydbeck [Rydbeck] W1-4 Olaf – at angle. Onsala Sweden
Munro [Geo Munro] W1-4 Sydney Univer, ionosphere scientist
Findlay [Findlay] W1-4 John Findlay , NRAO
Smerd [SF Smerd] W1-4 Steve Smerd,radio astronomy of sun CSIRO
Smerd [Peter Smerd] W1-4 Steve's son
Robinson [Robinson] W1-4 at edge perpendicular. Brian from CSIRO



2 PM

Pier S1. side 3 to center

Side 1 2pm

Rechtin [S.E.Rechtin 62] S1-1 ARPA, Advanced Research Projects Administration
Mot [Mot] S1-1. ?
Pake [G.Pake] S1-1 ? St Louis



Side 2 2pm

Ko [Ko] S1-2, Ohio, HC Ko
Davies [L.W. Davies] S1-2 CSIRO, later Univer of New South Wales.
Green [P. Green] S1-2 Paul Green – on the first Venus radar paper. at an angle. , Lincoln Lab
Ratcliffe [JAR] S1-2, J. ("Jack") A. Ratcliffe, Ron's thesis advisor from Cambridge , Cavendish Lab
Watson-Munro [C. Watson-Munro] S1-2 University of Sydney
LaLonde [LaLonde] S1-2 Arecibo, L. Merle LaLonde
Fleischer [R. Fleischer] S1-2 NSF
Cooper [Brian Cooper] S1-2 CSIRO, vertical



Side 3 2pm

Locke [Locke] S1-3 NRC, J.L. Locke Ottawa
Warwick [Jim Warwick] S1-3 U. Colorado, Boulder

Firor [John Firor]	S1-3, NCAR Boulder Colorado , formerly Carnegie Washington
Denisse [Denisse]	S1-3 crossed -signature with J. Paul Wild
Wild [Wild]	S1-3 crossed –signature with J.F. Denisse



Side 4 2pm
blank

3 PM

Pier W2. side 4 to center

Side 1 3pm

Sahade [J. Sahade]	W2-1 La Plata Argentina, list
Simmons [J. Simmons]	W2-1 any ideas ? not in list
Gardiner [F Gardiner]	W2-1 Frank Gardiner, CSIRO Radiophysics, list
Trexler [JHT ₆₀₀]	W2-1, JH TRexler 600 foot Sugar Grove telescope,NRL
Dyce [Dyce]	W2-1 Rolf Dyce worked with Irwin Shapiro , Stanford , MIT, Arecibo
Howard [Howard 72]	W2-1 Bill Howard NRAO



Side 2 3pm

blank

Side 3 3pm

D'Etigny [Enrique d'Etigny] W2-3 Dean Physical Science and Math, Universidad de Chile 1963-1971
Wilcox [Wilcox] W2-3 ?
Pettengil [Pettengill] W2-3 MIT , Cornell. Gordon Pettengill
CKR [CKR] W2-3 ?
Akabane [K. Akabane] W2-3 Tokyo .
Straiton [Straiton] W2-3 A.W. "Archy" Straiton, Elec Engineering U Texas.



Side 4 3pm

Salpeter [E. Salpeter] W2-4 Cornell. Fellow graduate of Sydney University, Ed Salpeter
Field [G. Field] W2-3 Princeton , Berkeley, Harvard , George Field



4 PM

Pier N2. (off the pad) side 3 to center

Side 1 4pm

Kownacki [Kownacki] N2-1. S. Kownacki , Lockheed Missiles and Space Company, Sunnyvale



Side 2 4pm

Abhyankar [Abhyankar] N2-2. Phd from Berkeley in 1950s. KD Abhyankar .Hyderabad, Osmania Uni
Bretz [Bretz] N2-2 Marianne Bretz- Gottingen, High Altitude Observatory (1957),Marseille -1962
Kauffman , Pierre N2-2 solar radio astronomer – Sao Paulo .



Side 3 4pm

WCS [WCS] N2-3 ?
Lynden-Bell [D. Lynden-Bell] N2-3,

Donald, Institute of Astronomy Cambridge. Pecked-dot signature



Side 4 4pm

Parrent [G. Parrent]	N2-4, George B. Parrent, Air Force Cambridge Research Center
Franklin [K.L. Franklin]	N2-4, Hayden Planetarium, co-discoverer of Jupiter bursts. See W1-1 - Burke
Webster, A.	N2-4 ? (not Hugh Webster from CSIRO and Brisbane)
Dowden [R.L. Dowden]	N2-4 Ionospheric Prediction Service and Univer of Tasmania and Uni Otago



Pier N5 — at entrance of the sundial park (not a part of the sundial)

Side 1 pier near dish

Rossi, Bruno [B.Rossi,12-29-70] near dish-2 Las Alamos, MIT, space astronomy.
Lovell [ACB Lovell 4-18-67] N5-1 script – ACB Lovell 1913-2012. Jodrell Bank



Side 2 pier near dish

Ekers [R. Ekers] N5-2 Ron Ekers, former VLA director. Now CASS, CSIRO Australia.



Side 3 pier near dish

Herrero [Vic Herrero] N5-3 former NRAO , Green Bank early 1970s, VLA circa 1980



Side 4 pier near dish

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