Interesting Facts and Unusual Aspects of the Signatures

- Miller Goss

[photos of the signatures of some of the mentioned persons are at the end of this document; those names with photos are indicated by **]

At the time of the 23 September 2013 inauguration of the sundial, about 180 of the signatures had been identified with visitors from other institutions, as well as Stanford colleagues. Professor David Leeson, a friend and colleague of Bracewell in the Electrical Engineering Department at Stanford, provided many suggestions for identifications and their connections to Bracewell. Australian colleagues (many from World War II radar days) represent about 50 of the 225 signatures. A noteworthy signature was contributed by Joan Freeman Jelly**, an associate of Ruby Payne-Scott at the Radiophysics Lab during World War II.¹ Many of the signatures were acquired during a tour of the array in August 1961, as part of a General Assembly of the International Astronomical Union held at nearby Berkeley.

I found a few surprises while doing detective work on the signatures. The pier at the entry to the Sundial Plaza is the only one of the ten that is not part of the sundial. It is displayed adjacent to our sole 10-ft dish (of the original 32²), and was chosen because it contains the spectacular A.C.B. Lovell** signature. Sir Bernard effected his signature by writing his name on a piece of paper that was then given to a Stanford staff member who carved the signature for the famous guest.³

When I sprayed the side of the pier adjected to the Lovell signature, I was surprised and pleased to find the R.D. Ekers** signature, recognizably in the hand of the man who was VLA Director (1980-88) and later Foundation Director of the Australian Telescope.

A special problem arose with signatures in Russian, Greek and Chinese scripts. Tasso Tzioumis of CSIRO provided the Greek translation while Minnie Mao (then at NRAO) provided the Chinese translations. Goss was surprised that his colleague Delin Xiang** (from Nanjing) was one of the signatories.

¹ This signature was adjacent to that of her husband John Jelly.

² Most of the dishes had been removed in the years 1980 to 2012 to be used for TV satellite reception at Stanford. Fortunately, one dish remained (at the West-1 location), which was brought to the VLA and fully restored by the VLA staff.

³ This story was told to us by A. Richard Thompson

Eighteen persons chiselled only initials or partial signatures. About half of these can be identified. Examples are "BMO" (Barney Oliver of Hewlett-Packard and a friend of Bracewell's) and "CLS" (Charles S Seeger, brother of the famous folk singer Pete Seeger). Seeger was a radio astronomer who for a while worked for Bracewell at Stanford. "HTF" was contributed by Harald Friis, who was Karl Jansky's supervisor at Bell Telephone Labs in the 1930s. Friis then retired to Palo Alto until his death in 1976. "JAR" was created by Jack Ratcliffe** of the Cavendish Lab at Cambridge University and Bracewell's PhD supervisor. The mysterious "JACK" was created by W.J. Welch of Berkeley, discovered during a visit by Welch to the VLA in October 2017. The innovative "JHT600" was created by James H. Trexler** (Naval Research Laboratory), proponent of the abortive 600 foot radio dish at Sugar Grove, West Virginia during the late 1950s. "KK" was contributed by Kenneth I. Kellermann, a Caltech graduate student who was attending the Berkeley IAU. As a student, he had to wait for the more senior visitors to chisel their signatures. The bus back to Berkeley was about to leave as he rushed to shorten his name to only "KK"!

Some are initials that are unknown to us, e.g. "BJE" and "WCS." Others are complete names with no secure identifications — examples are "Barber", "Barcus", "Barker", "Bennett", "Eball", "Hoffman", "Luts-Doc", "Mendoza", "Mot", "Simmons", "Vakaney" and "A. Webster".

Donald Lynden-Bell** made his signature in a "pecked dot" style. Tommy Gold** played a prank by making his signature incisions on top of Harry Messel's**.

The only family represented is that of the Shanes**: parents C. David and Mary and son Whitney. Paul Wild** (Australian solar observer) and Jean-François Denisse** (leading French solar theorist) aptly coordinated their signatures into a crossword-like pattern. Willy Fowler** won a Nobel Prize in Physics and Frank Drake** pioneered the Search for Extraterrestrial Intelligence (SETI) in the 1960s. Jan Oort** was one of the greatest of 20th century astronomers and the leader of the Dutch effort in radio astronomy. Maarten Schmidt** discovered the enigmatic quasars. Joe Pawsey** was leader of the Australian radio astronomers, including Ron Bracewell**, John Bolton**, "Chris" Christiansen** and Bernie Mills**, and many others.

[Photos of signatures start on the next page]

Joan Jelley

(Priscilla) Bok & (Bart) Bok







Delin Xiang (Chinese)



Linda Wu (Chinese)



Mary Shane



Virginia Lincoln



Arkady Kuzmin (Russian)



James H. Trexler [JHT 600']



Ron Ekers



Sir Bernard (A.C. B) Lovell



Stanley H. Zisk



Donald Lynden-Bell



Peter A. Sturrock



William Sweet



Thomas Gold & Harry Messel



The **Shane** family of 3 astronomers: parents C. Donald and Mary and son Whitney





Paul Wild & Jean-François Denisse



Maarten Schmidt



Frank D. Drake & Willy Fowler



John A. "Jack" Ratcliffe



Joseph Pawsey



Wilbur N. "Chris" Christiansen



Bernie Mills



Noon Pier: Ron Bracewell, John Bolton, Jan Oort et al.