



The Dedication

Some 160 visitors, many from thousands of miles away, made the trek up Mauna Kea for the dedication ceremony on 28 September, 1979. It was a typical beautiful Hawaiian day as the caravan of close to 40 four-wheel drive vehicles moved slowly up the dusty and winding road to the top, passing through the lunar-like landscape of the mountain slopes.

Inside the observatory, the elegant apparatus awaiting the visitors resembled something "out of a James Bond movie" as Governor Ariyoshi put it. But the staging that day was strictly Hawaiian. The massive, gleaming new telescope was attached to the mezzanine deck by long strands of vanda orchids intertwined with maile leaves and dozens of colorful anthuriums blazed at its foot: the sound of conch shell trumpeted over the intercom system. The dome

was open to the rarefied air and the flags of Canada, France, Hawaii, and the United States fluttered now and then.

The untying of the three lei strands capped the dedication ceremony which included the playing of the national anthems, official speeches by Professor Charles Fehrenbach, chairman of the CFHT Board, Roch LaSalle, Canada's minister of Supplies and Services, Pierre Aigrain, France's minister of Research, and Hawaii's Governor George Ariyoshi, and a benediction by a Hawaiian priest.

Later at a prime rib and French wine luncheon in Waimea, dignitaries toasted the project and Nobel Laureate Dr. Gerhard Herzberg praised the new site and the "endeavors of those that try to understand the universe and the nature and role of man in it".

Progress on the Telescope

The first trials on the sky in August and September were very successful but several problems had to be fixed before resuming observations efficiently. The main problem concerned the prime focus cage which proved uncomfortable for the observer and unreliable because of poor or temporary cabling.

The prime focus cage has since been brought down to the observing floor and work on the internal arrangement and recabling is in progress.

Meanwhile the Cassegrain upper end with a dummy mirror has been placed on the telescope tube so that control system tests can proceed with the telescope in balance.

Several other problems will also have to be solved before the telescope can be used by the first visiting astronomers in March 1980. They are in the following areas:

- The α and δ brakes have been judged to be too weak. New brakes will have to be installed in both alpha and delta.
- The tube is too light at the bottom by about two tons. Dead weights have been placed at the bottom in a temporary manner. The permanent solution consists in placing lead weights inside the cell structure.
- The mirror cell is not yet perfectly adjusted.

There is nothing serious but numerous and methodical adjustments have still to be made.

- The upper end handling ring has been shown to be very unreliable. Already in June the trials on the floor showed that the coupling system functioned badly but when it was necessary to take off the prime focus upper end in October the situation proved serious and dangerous and more than two weeks were needed to effect the operation. The centering system

and rigidity will have to be improved.

- Some instability has been found in the tracking mode. The cause is not obvious and requires additional testing.

In addition, extensive testing on the sky is required to refine the alignment of optics and polar axis and to determine the pointing errors and include them in the telescope setting program.

Commissioning Program

The tentative schedule for the commissioning of the various foci is as follows:

Prime focus: March 1980. Observations can be made without corrector (limited sources) or with a wide field corrector (approximately 1°) in the 3400 - 9000 Å interval.

Coudé focus: August 1980.

Infrared focus with F/35 Cassegrain: September 1980.

F/8 Cassegrain: mid 1981.

Instruments available in 1980 will be:

Plateholders (160 x 160 mm and 254 x 254 mm²) with guiding and focusing probe: March.

Prime focus guiding head: March.

ITT image tube (to be used at prime focus): June.

Grens: June.

Racine wedge (for prime focus): July

Grism: August.

CCD Camera (for prime focus): August.

F/7.4 Coudé spectrograph: September.

Cassegrain guiding head: October.

I.R. Photometer: October.

Fourier Transform Spectrometer: November.

The spectrograph No. 1 (for prime focus and Cassegrain use) and the spectrograph No. 2 (for Cassegrain) will not be available before 1981.

Requests for Observing Time

Observing time on the CFH telescope is allocated twice a year. Available time for the first semester has already been allocated.

It is anticipated that about 90 nights will be available during the last six months of 1980. Requests for observing time for that period should be submitted before March 1, 1980.

Application forms and technical data on telescope and instruments can be obtained from the following associated organizations:

For Canadian astronomers:

National Research Council
(Attention Dr. J.L. Locke)
Herzberg Institute of Astrophysics
100 Sussex Drive
Ottawa, Ontario
Canada K1A 0R6

For French astronomers:

Monsieur le Directeur de l'Institut National
d'Astronomie et de Géophysique
77, avenue Denfert-Rochereau
75014 Paris
France

For Hawaiian astronomers:

Prof. J.T. Jefferies
Institute for Astronomy
2680 Woodlawn Drive
Honolulu, Hawaii 96822
U.S.A.

For any supplementary informations write to the headquarters of the Corporation at the address shown at the end of this bulletin.

Astronomical Research

CFHT Resident Astronomer, Dr. Campbell has continued his work on a new method for observing stellar radial velocities with very high precision (less than 10 meter/sec) using an hydrogen-fluoride cell. This technique could be used to detect low mass companions, possible planets, around solar-like stars. A test has been made at the University of Hawaii 88-inch telescope with encouraging results. A final version of the instrument is being constructed for use with the coudé spectrograph of the CFH telescope.

FIRST 1980 SEMESTER OBSERVING SCHEDULE

Available observing time for the first semester of 1980 has been distributed as follows:

<u>Dates</u>	<u>Observers</u>
14 to 21 March	Lemaître
8 to 12 April	Van den Bergh/Harris
13 to 16 April	Tully
17 to 22 April	Hikson
7 to 9 May	Madore
10 to 15 May	Stockton/Thomson
16 to 22 May	Felenbok
9 to 11 June	Crampton
12 to 16 June	Hardy/Richer
17 to 22 June	Bonneau