

**Table 17.27-- ASTRONOMY AND RELATED FACILITIES AT  
THE SUMMITS OF MAUNA KEA AND HALEAKALA: 1999**

Facility (mirror diameter in meters)	Capital cost (\$ mil)	Annual operating cost (\$ mil)	Hawaii County based staff	Operational
Mauna Kea:				
UH 0.6-m (Optical)	0.3	(X)	(X)	1969
UH 2.2-m (Optical/Infrared)	5	0.75	8	1970
Canada-France-Hawaii 3.6-m (Optical/Infrared)	30	6.2	50	1979
NASA IRTF 3.0-m (Infrared)	10	3.0	12	1979
United Kingdom Infrared 3.8-m	5	2.7	31	1979
James Clerk Maxwell 15-m Submillimeter	32	3.5	43	1986
Caltech 10.4-m Submillimeter	10	2.1	10	1986
W.M. Keck Observatory (Keck I & II) 10-m x 2 (Optical/Infrared)	170	11.0	85	1992/96
VLBA Antenna 25-m (Radio)	7	0.25	2	1992
Submillimeter Array 8x6-m 1/	80	6.0	2/ 26	1999
Subaru (Japan National Large Telescope) 8-m (Optical/Infrared)	170	8.0	2/ 30	1999
Gemini Northern 8-m (Optical/Infrared)	100	5.0	2/ 30	1999
Mauna Kea Observatories Support Services	(NA)	3/ 1.9	24	
<b>Total</b>	<b>619</b>	<b>48.5</b>	<b>351</b>	
Haleakala:				
Mees Solar Observatory	0.5	0.1	2	1964
Lunar Ranging Facility	3.3	0.7	7	1976/84
Haleakala Observatories Projects	(NA)	0.5	4	
Maui Space Surveillance Site (MSSS) 4/ Advanced Electro-Optical System 3.7-m Telescope (AEOS)	200.0	16.0	120	1997
Haleakala Support Facilities	(NA)	0.13	6	
<b>Total</b>	<b>253.8</b>	<b>32.43</b>	<b>194</b>	

NA Not available.

X Not applicable.

1/ Under construction.

2/ Approximate expected number when in operation.

3/ Not included in the total since derived from facility operating funds.

4/ Formerly Air Force Maui Optical Station (AMOS).

Source: University of Hawaii at Manoa, Institute for Astronomy, *Fact Sheet*.