

4.2.2 APOLLO INTERMEDIATE CHART (AIC) SERIES

(Published by ACIC)

Apollo Intermediate Charts

Scale: 1:500,000

Projection: Mercator

Sheet Size: 22" x 29"

The Apollo Intermediate Chart Series (AIC) was produced to support early planning in the primary portion of the Apollo Zone of interest.

This series was constructed on a Mercator project with true scale at 11.0125° North and South latitude. Its area of coverage is from 0° to 8° north and south latitude and 50° east to 50° west longitude. The twenty charts, which comprise the AIC series, were published between August 1965 and January 1967.

Feature positions and elevation show on these charts are based on the ACIC Selenodetic System (1965). To support chart compilation at this scale, supplementary positional data was developed in each chart area.

The charts were developed from earth-based telescopic photograph, which were rectified and mosaicked to fit the horizontal control network. Photographic details were supplemented by visual telescopic observations accomplished at Lowell Observatory in Flagstaff, Arizona.

The shaded relief drawing contained was developed using an assumed light source from the west to portray relief features as they would appear when the angle of illumination is equal to the angle of slope. This resulted in a drawing which simulates the lighting conditions on the lunar landscape under the evening terminator, but without shadows. Also, a background coloration drawing was prepared to supplement the shaded relief portrayal. This drawing depicts the varieties in reflectance of the lunar surface under full moon illumination. The two drawings were lithographed with the relief in green and the background coloration in light blue.

Definition of relief includes lunar radius vectors of selected features and their estimated reliability. Relative heights and crater depths determined by shadow measuring techniques are also shown.

Feature names were taken from the International Astronomic Union nomenclature system. As necessary, a dotted or dashed limit line was used to positively identify the exact feature.

The shaded relief is also printed on the reverse side of these charts. All overprinting information was omitted to provide the user an unobstructed view of the interpreted lunar surface detail. Selected areas of interest on the reverse side printing are outlined and described in the margin with respect to the observed appearance without an intended inference as to the origin and development of the lunar surface.

DMAAC – February 1973 — Apollo Intermediate Chart (AIC) Series

Chart margin information includes chart title, general notes, bar scale reliability diagrams and a sheet index reference to the LAC series. Within the border notes are statements on the control, datum, nomenclature, relief portrayal and elevation data. Extent of coverage of individual AIC charts is show in Map Index I (5).

<u>CHART NO.</u>	<u>NAME</u>	<u>EDITION AND DATE</u>
AIC 57C	Encke	1 st Ed Aug 1966
AIC 57D	Maestlin	1 st Ed Aug 1966
AIC 58C	Gambart	1 st Ed May 1965 2 nd Ed Aug 1966
AIC 58D	Reinhold	1 st Ed Mar 1965 2 nd Ed Aug 1966
AIC 59C	Triesnecker	1 st Ed Jan 1966
AIC 59D	Pallas	1 st Ed Jan 1966
AIC 60C	Arago	1 st Ed Mar 1966
AIC 60D	Agrippa	1 st Ed May 1965 2 nd Ed Aug 1966
AIC 61C	Secchi	1 st Ed Jan 1967
AIC 61D	Maskelyne D	1 st Ed May 1966
AIC 75A	Flamsteed	1 st Ed Aug 1966
AIC 75B	Wichmann	1 st Ed Aug 1966
AIC 76A	Euclides P	1 st Ed Jun 1966
AIC 76B	Fra Mauro	1 st Ed Jun 1966
AIC 77A	Flammarion	1 st Ed May 1965 2 nd Ed Sep 1966
AIC 77B	Hipparchus	1 st Ed Mar 1966

<u>CHART NO.</u>	<u>NAME</u>	<u>EDITION AND DATE</u>
AIC 78A	Delambre	1 st Ed Mar 1966
AIC 78B	Torricelli	1 ST Ed Apr 1966
AIC 79A	Capella	1 st Ed Jun 1966
AIC 79B	Messier	1 st Ed Dec 1966