

**Maria:**

**North:**

1–Mare Frigoris (Sea of Cold)

2–Mare Imbrium (Sea of Rains)

3–Sinus Aestuum (Bay of Seething)

**Northeast:**

4–Sinus Medii (Bay of the Center)

5–Mare Vaporum (Sea of Vapors)

6–Mare Serenitatis (Sea of Serenity)

7–Mare Tranquillitatis (Sea of Tranquillity)

8–Mare Crisium (Sea of Crises)

17–Lacus Somniorum (Lake of Sleep)

18–Palus Somnii (Marsh of Sleep)

19–Mare Anguis (Sea of Snakes)

20–Mare Undarum (Sea of Waves)

**Southeast:**

9–Mare Fecunditatis (Sea of Fecundity)

10–Mare Nectaris (Sea of Nectar)

21–Mare Spumans (Sea of Foam)

**Southwest:**

11–Mare Nubium (Sea of Clouds)

12–Mare Humorum (Sea of Moisture)

13–Mare Cognitum (Known Sea)

22–Palus Epidemiarum (Marsh of Diseases)

West:

14–Oceanus Procellarum (Ocean of Storms)

Northwest:

15–Sinus Roris (Bay of Dew)

16–Sinus Iridum (Bay of Rainbows)

Montes (Mountains):

Northeast:

23–Montes Alpes

24–Vallis Alpes (Alpine Valley)

25–Montes Caucasus

26–Montes Apenninus

27–Montes Haemus

28–Montes Taurus

Southeast:

29–Montes Pyrenaeus

Southwest:

30–Rupes Recta (Straight Wall) [Geological Fault]

31–Montes Riphaeus

**Northwest:**

**32-Vallis Schröteri (Schröter's Valley) [Northwest of Crater Aristarchus, 73, and North of Crater Herodotus]**

**33-Montes Jura**

**Craters:**

**Northeast:**

**34-Crater Aristotle [on the East part of Mare Frigoris, 1]**

**35-Crater Cassini**

**36-Crater Eudoxus**

**37-Crater Endymion**

**38-Crater Hercules**

**39-Crater Atlas**

**40-Crater Mercurius**

**41-Crater Posidonius**

**42-Crater Zeno**

**43-Crater Le Monnier**

**44-Crater Plinius**

**45-Crater Vitruvius**

**46-Crater Cleomedes**

**47-Crater Taruntius**

**48-Crater Manilius**

**49-Crater Archimedes**

**50-Crater Autolycus**

**51-Crater Aristillus**

**Southeast:**

**52-Crater Langrenus**

**53-Crater Goclenius**

**54-Crater Hypatia**

**55-Crater Theophilus**

**56-Crater Rhaeticus [Crater Hipparchus is directly South of Crater Rhaeticus]**

**57-Crater Stevinus**

**58-Crater Ptolemaeus**

**59-Crater Walter**

**Southwest:**

**60-Crater Tycho**

**61-Crater Pitatus**

**62-Crater Schickard**

**63-Crater Campanus**

**64-Crater Bulliadus**

**65-Crater Fra Mauro**

**66-Crater Gassendi**

**67-Crater Byrgius**

**68-Crater Billy [Mons Hansteen is to the North of Crater Billy]**

69-Crater Crüger

70-Crater Grimaldi

71-Crater Riccioli

Northwest.

72-Crater Kepler

73-Crater Aristarchus [Crater Herodotus is West of Crater Aristarchus]

74-Crater Copernicus

75-Crater Pytheas

77-Crater Mairan 78-Crater Timocharis 79-Crater Harpalus [Crater  
Pythagoras is North of Crater Harpalus]

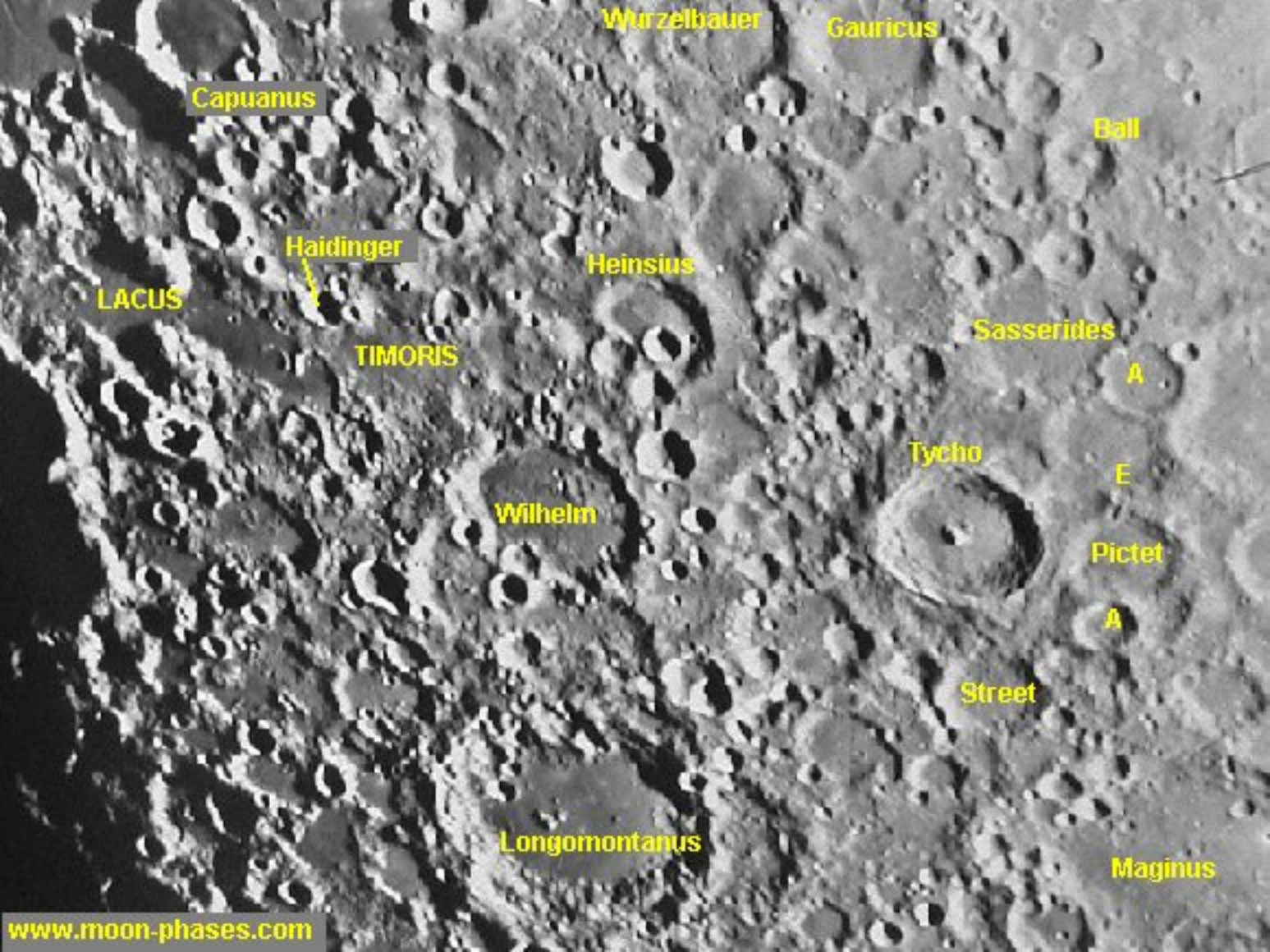
80-Crater Plato Manned Lunar Landing Missions. -- -Apollo 11 (July 20  
'69) [Southwestern extreme of Mare Tranquilitatis, 7] -- -Apollo 12

(November 19 '69) [Northern extreme of Mare Cognitum, 13] -- -Apollo  
13 (April 13 '70) [could not land North of Crater Fra Mauro, 65] -- -

Apollo 14 (February 5 '71) [North of Crater Fra Mauro, 65] -- -Apollo 15  
(July 31 '71) [Northern extreme of Montes Apenninus, 26] -- -Apollo 16

(April 21 '72) [between Craters Theophilus, 55, and Hipparchus] -- -  
Apollo 17 (December 11 '72) [Southern extreme of Montes Taurus, 28]

Notes. The Moon has a surface area of some 37.96 million Km<sup>2</sup>, and a  
diameter of some 3,476 Km. The directions East (E) and West (W) marked  
on the graphic, are directions as seen from the Moon; These are opposite  
of East and West as seen from the Earth. ARVAL's Moon Map shows the  
Moon as seen through binoculars or the naked eyes, it does not invert the  
image in any direction. The original Full Moon photograph, compressed  
and reduced for this page, is a copyright © of the UCO/Lick Observatory  
(University of California Observatories).



Capuanus

Wurzelbauer

Gauricus

Ball

Haidinger

Heinsius

LACUS

TIMORIS

Sasserides

A

Wilhelm

Tycho

E

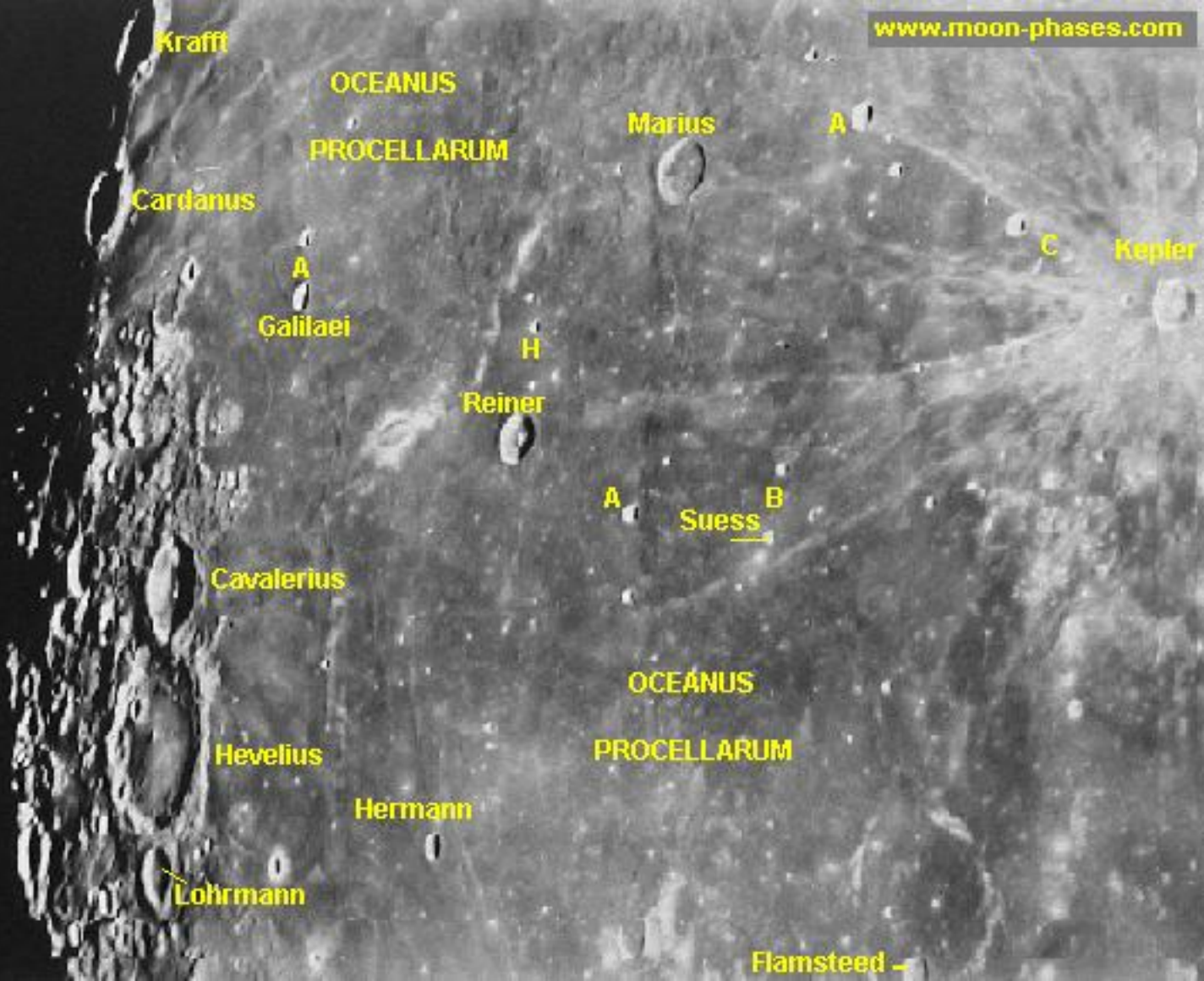
Pictet

A

Street

Longomontanus

Maginus



Krafft

OCEANUS

PROCELLARUM

Marius

A

Cardanus

A

Galilaei

H

Reiner

C

Kepler

A

Suess

B

Cavalerius

OCEANUS

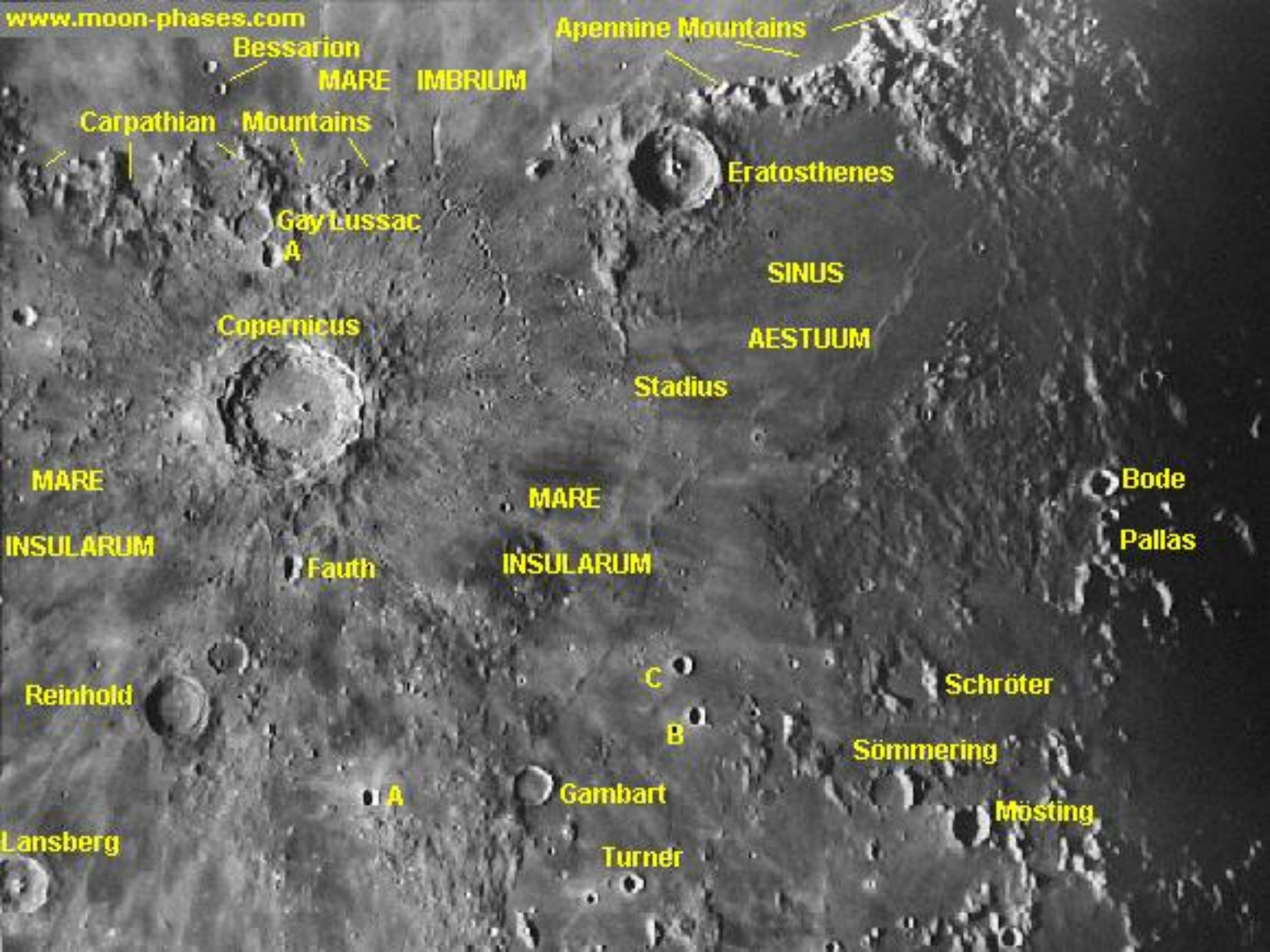
PROCELLARUM

Hevelius

Hermann

Lohrmann

Flamsteed



Apennine Mountains

Bessaron

MARE IMBRIUM

Carpathian Mountains

Gay Lussac A

Eratosthenes

SINUS

Copernicus

AESTUUM

Stadius

MARE

MARE

Bode

INSULARUM

INSULARUM

Pallas

Fauth

Reinhold

C

Schröter

B

Sömmering

A

Gambart

Mösting

Lansberg

Turner

MARE IMBRIUM

Eratosthenes

MARE

VAPORUM

SINUS AESTUUM

Stadius

Copernicus

Ukert

Hyginus

Bode

MARE

Schröter Hills

Pallas

Murchinson  
Triesnecker

INSULARUM

Gambart

Hills

C

B

Schröter

Chladni

SINUS

Gambart

Sommering

Bruce

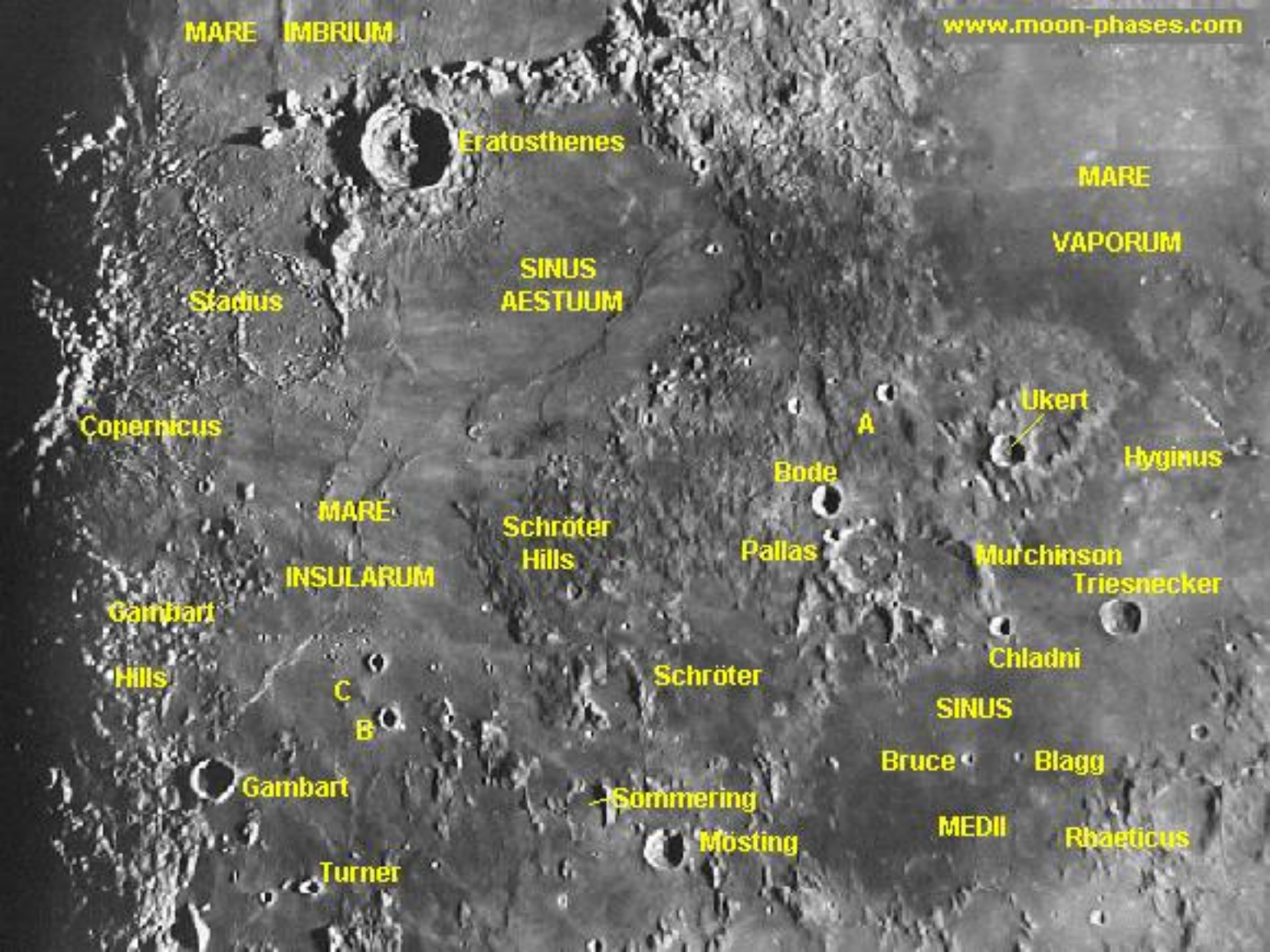
Blagg

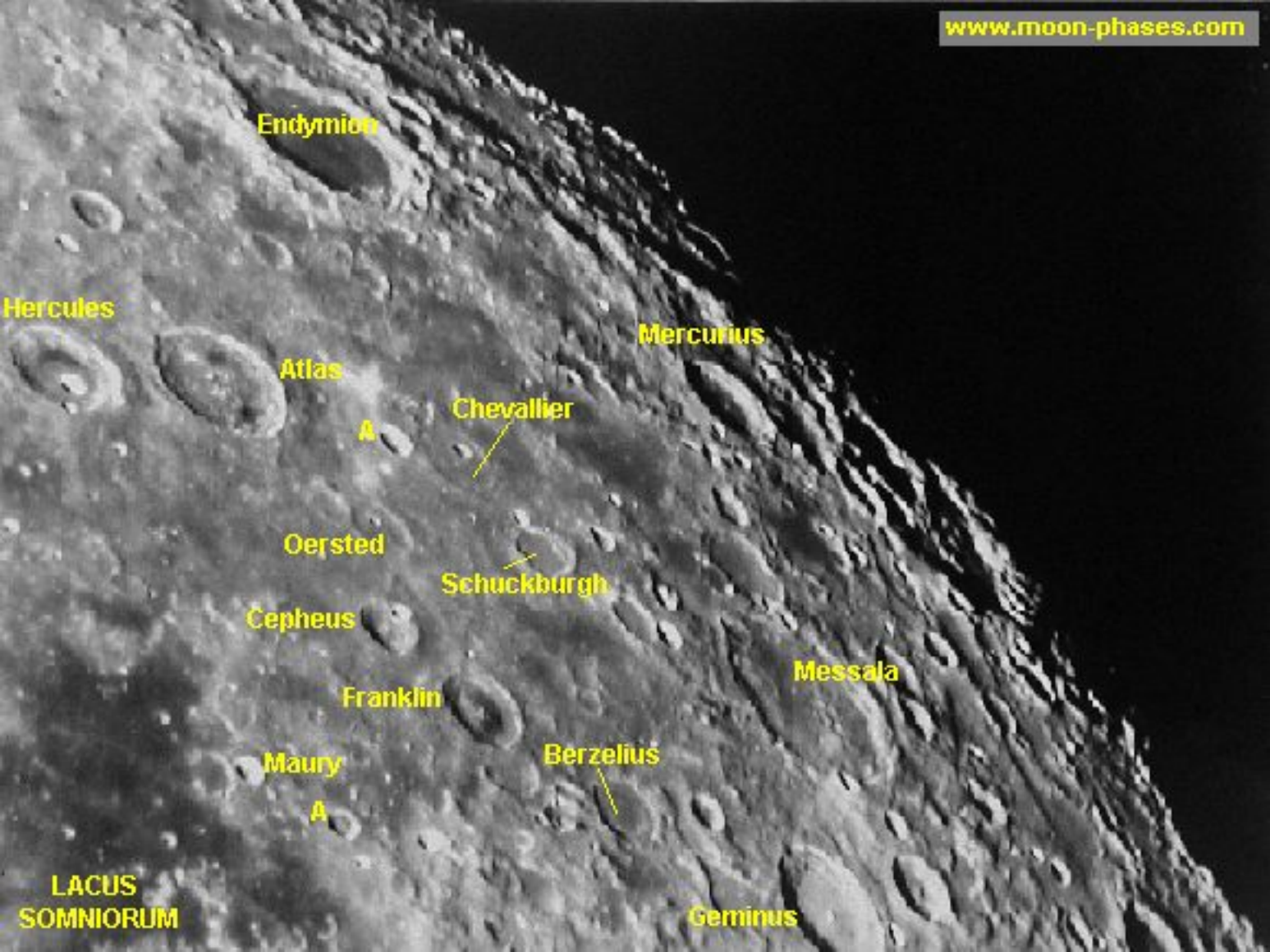
Turner

Mösting

MEDII

Rhaeticus





Endymion

Hercules

Mercurius

Atlas

Chevallier

A

Oersted

Schuckburgh

Cepheus

Messala

Franklin

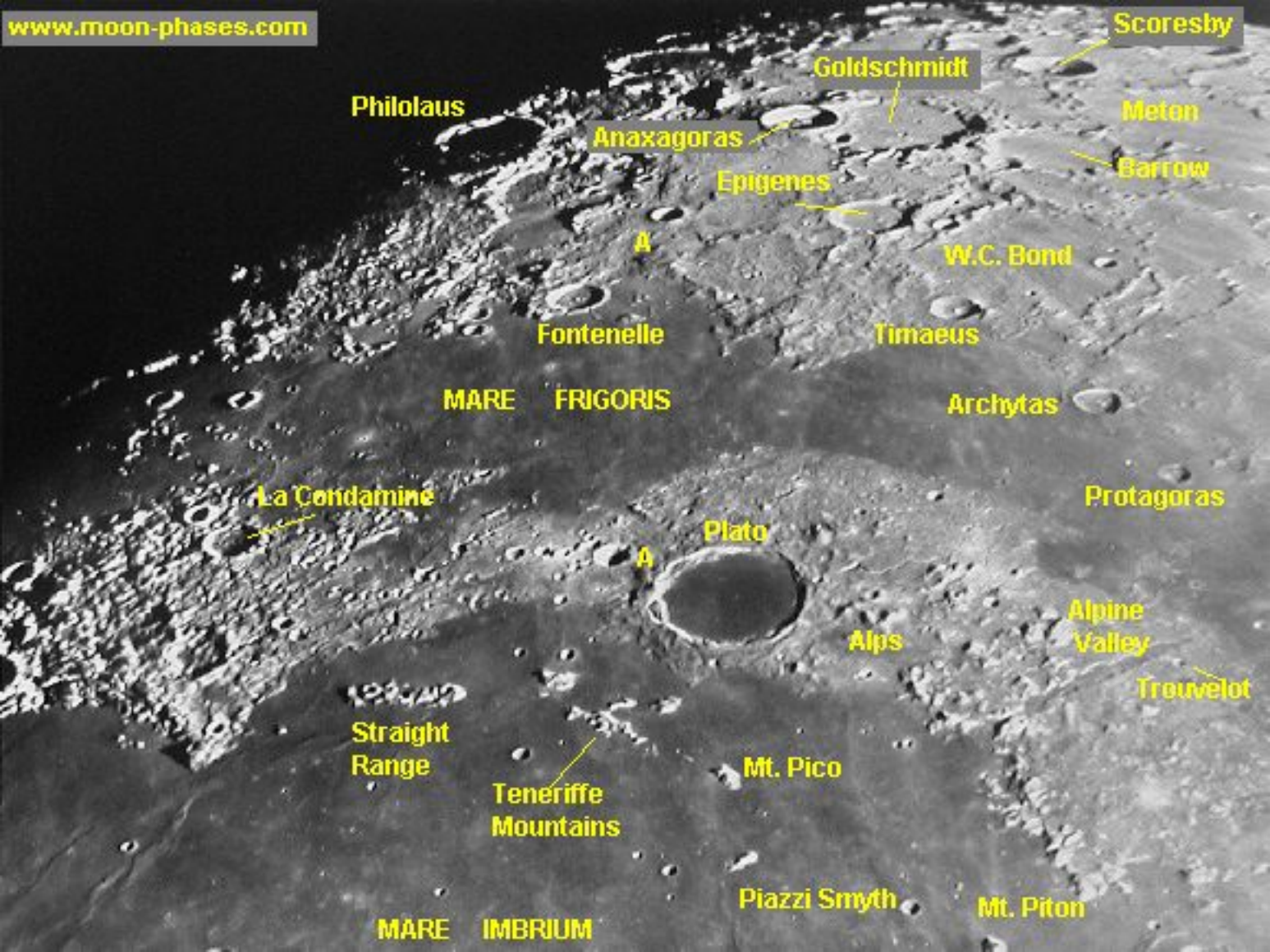
Maury

Berzelius

A

LACUS  
SOMNIORUM

Geminus



Philolaus

Anaxagoras

Epigenes

Goldschmidt

Scoresby

Meton

Barrow

W.C. Bond

Fontenelle

Timaeus

MARE FRIGORIS

Archytas

La Condamine

Protagoras

Plato

Alps

Alpine Valley

Trouvelot

Straight Range

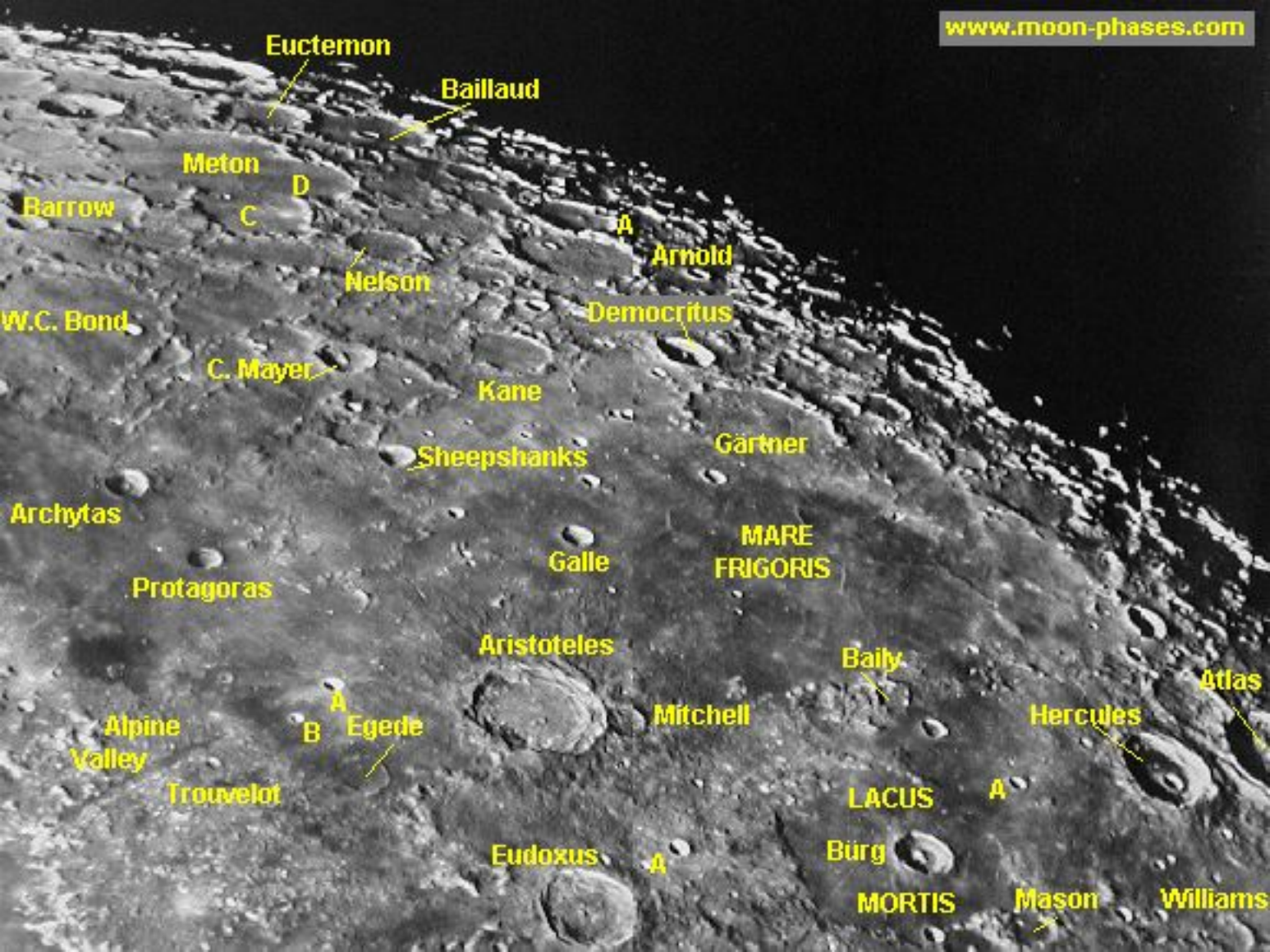
Teneriffe Mountains

Mt. Pico

MARE IMBRIUM

Piazz Smyth

Mt. Piton



Euctemon

Baillaud

Meton

Barrow

C

D

A

Arnold

Nelson

Democritus

C. Mayer

Kane

Sheepshanks

Gartner

Archytas

Protogoras

Galle

MARE FRIGORIS

Aristoteles

Baily

Atlas

Alpine Valley

B

A

Egede

Mitchell

Hercules

Trouvelot

Eudoxus

A

LACUS

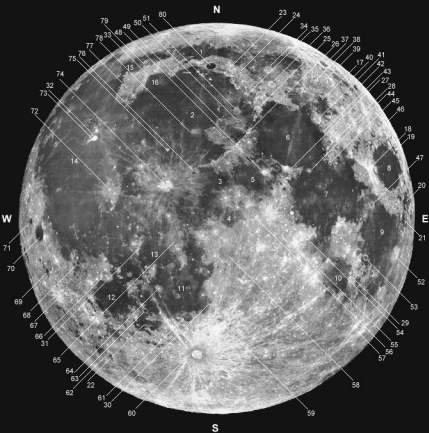
A

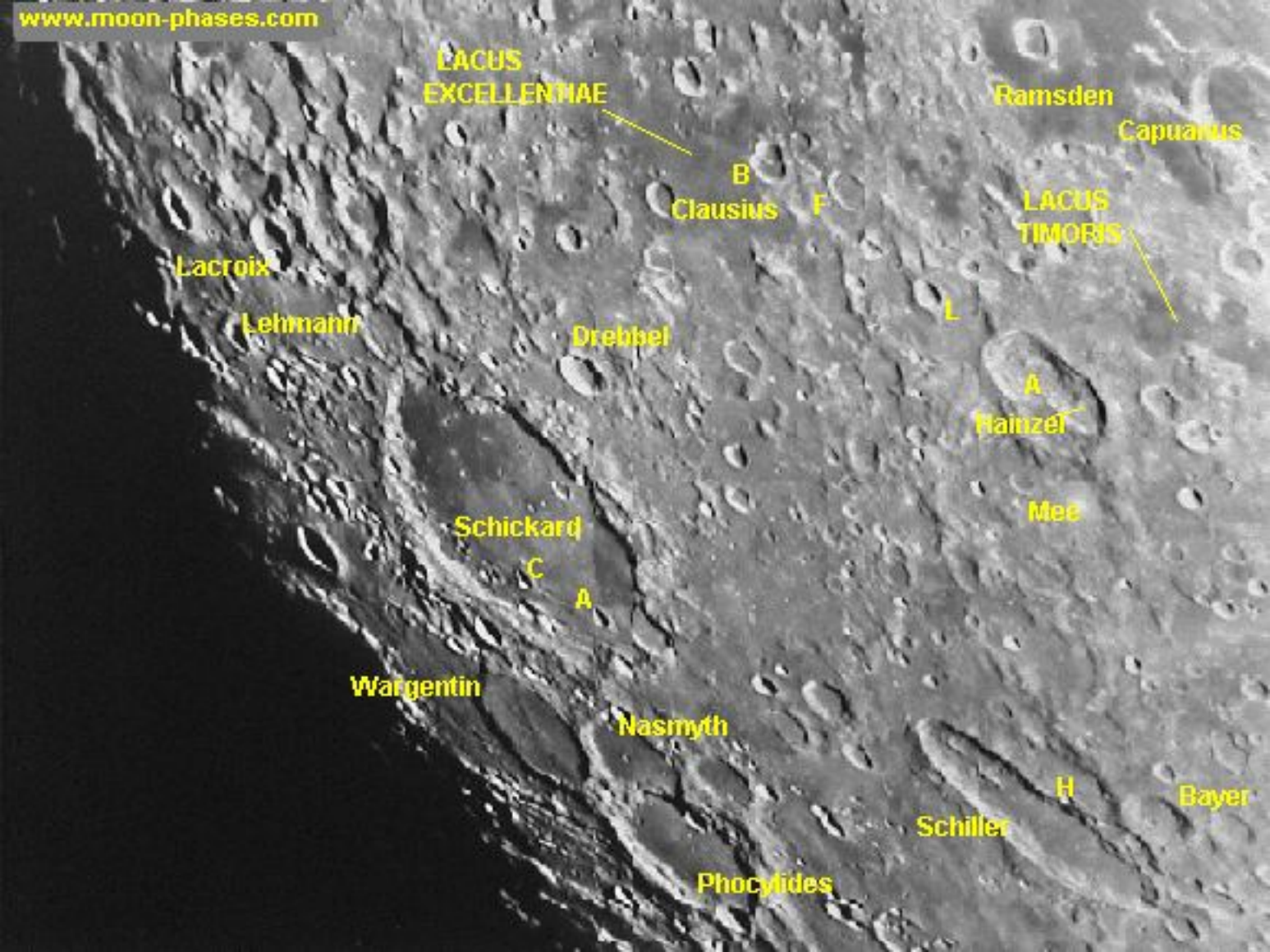
Birg

MORTIS

Mason

Williams





LACUS  
EXCELLENIAE

Ramsden

Capuanus

B  
Clausius

F

LACUS  
TIMORAE

Lacroix

Lehmann

Drebbel

L

A  
Hainzel

Schickard

C

A

Mee

Wargentin

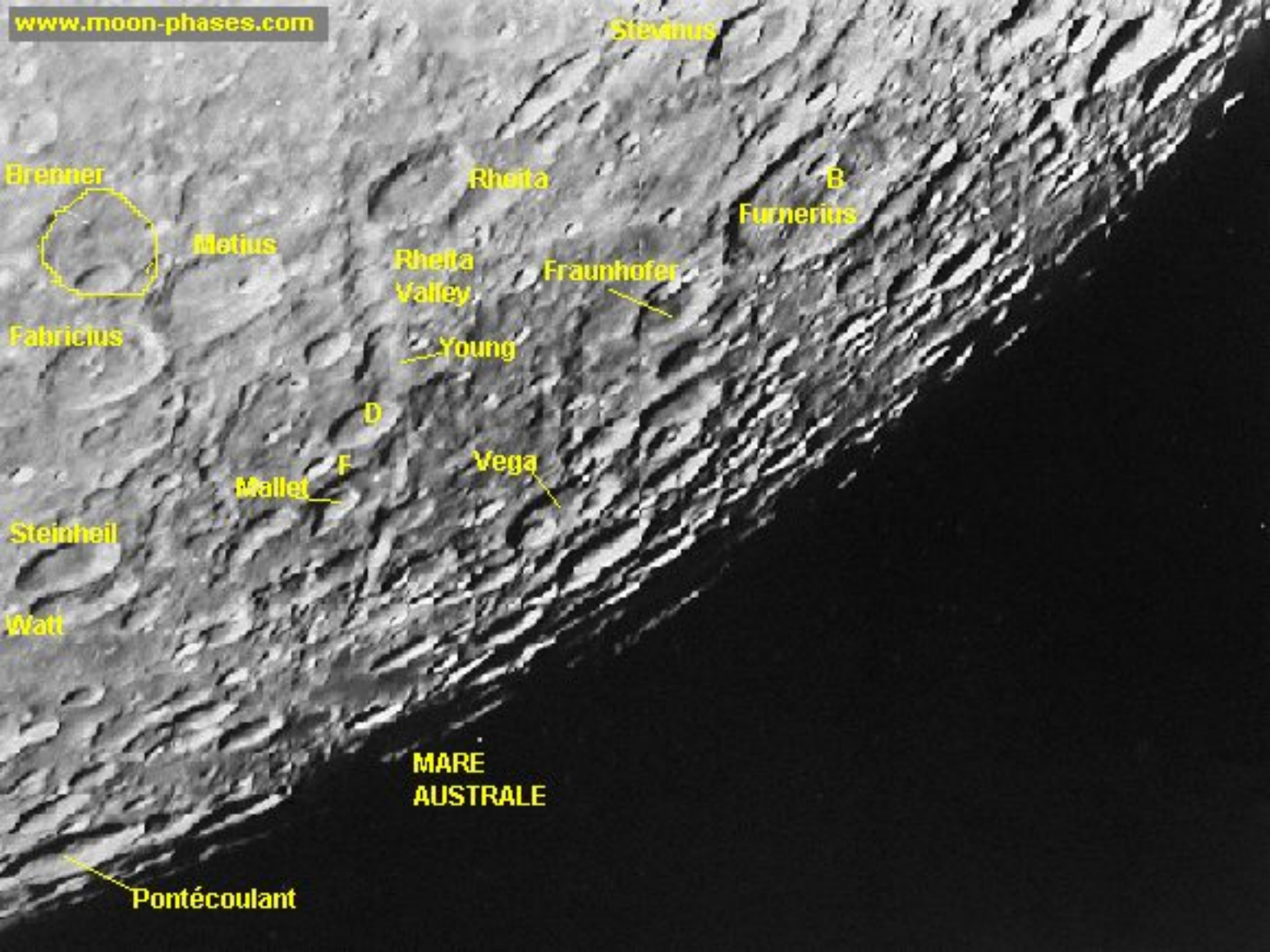
Nasmyth

Schiller

H

Bayer

Phocylides



Stevinus

Brenner

Rheita

B



Motius

Furnerius

Rheita Valley

Fraunhofer

Fabrichius

Young

D

F

Vega

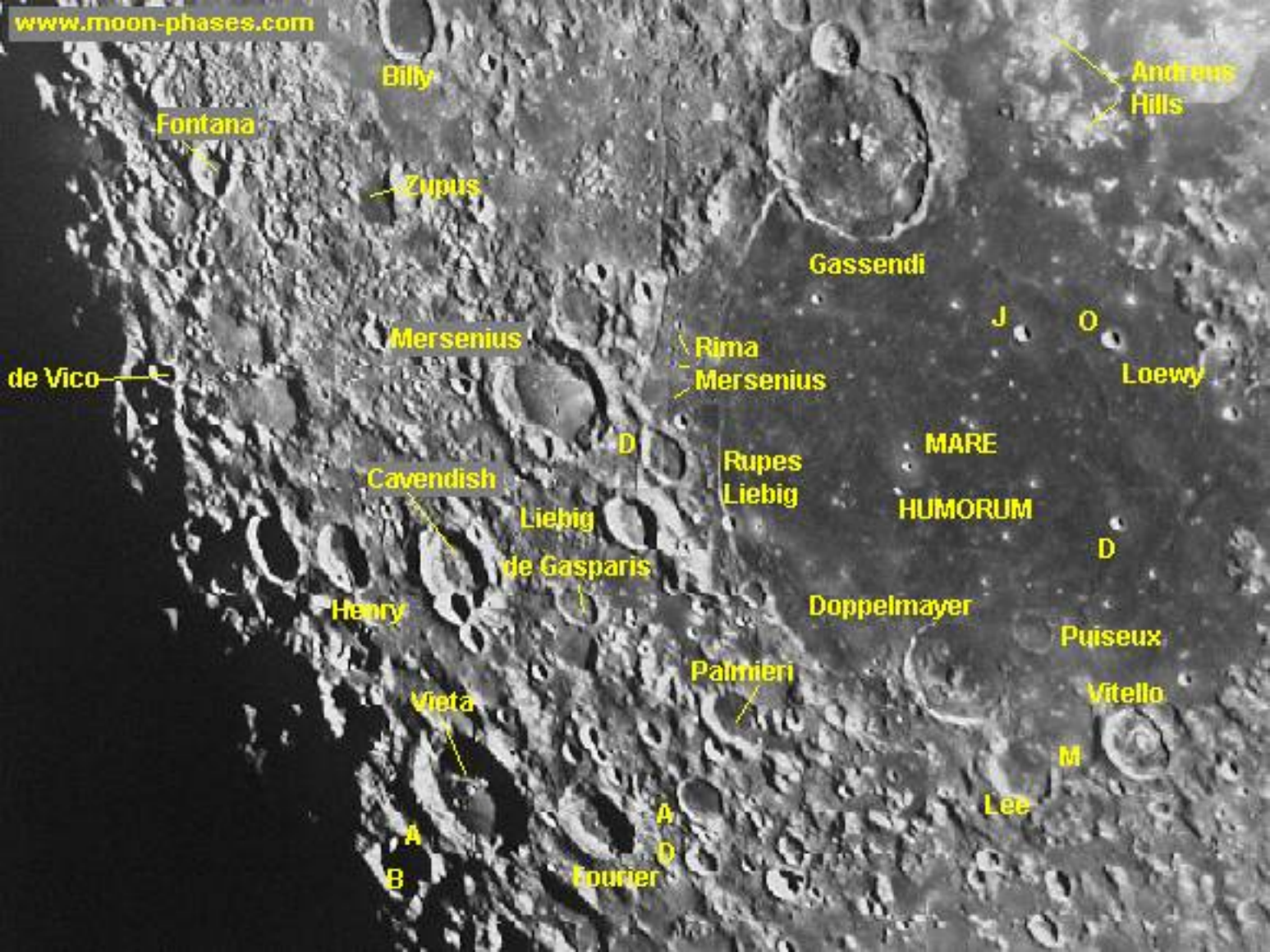
Mallet

Steinheil

Watt

MARE AUSTRALE

Pontécoulant



Billy

Andreas Hills

Fontana

Zupis

Gassendi

J

O

de Vico

Mersenius

Rima Mersenius

Loewy

D

Rupes Liebig

MARE

HUMORUM

D

Cavendish

Liebig

de Gasparis

Doppelmayer

Henry

Puiseux

Palmieri

Vitello

Vieta

M

Lee

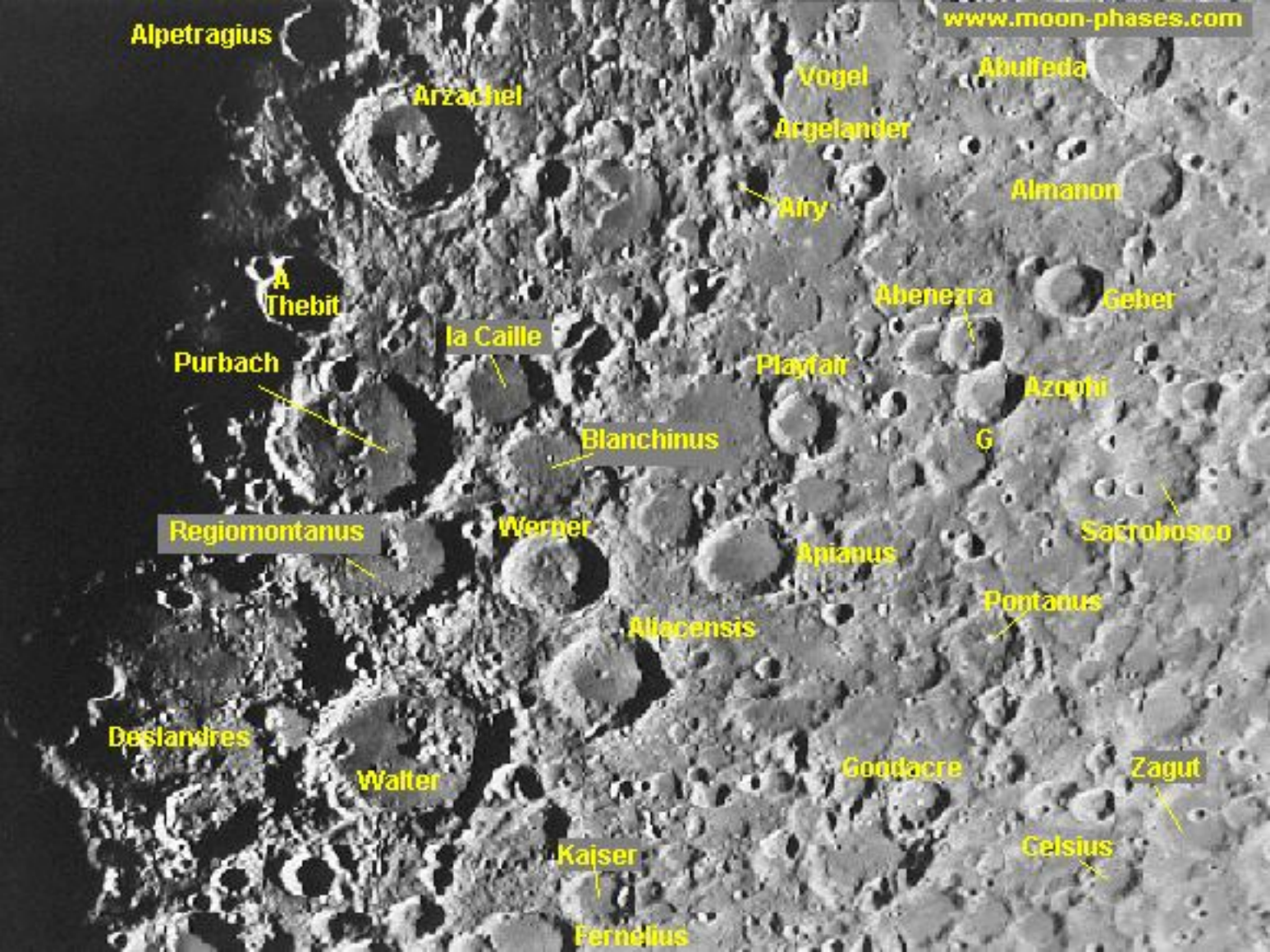
A

A

B

Fourier

O



Alpetragius

Arzachel

Vogel

Abulfeda

Argelander

Almanon

Airy

A  
Thebit

Abenezra

Geber

Purbach

la Caille

Playfair

Azophi

Blanchinus

G

Regiomontanus

Werber

Apianus

Sacrobosco

Allacensis

Pontanus

Deslandres

Walter

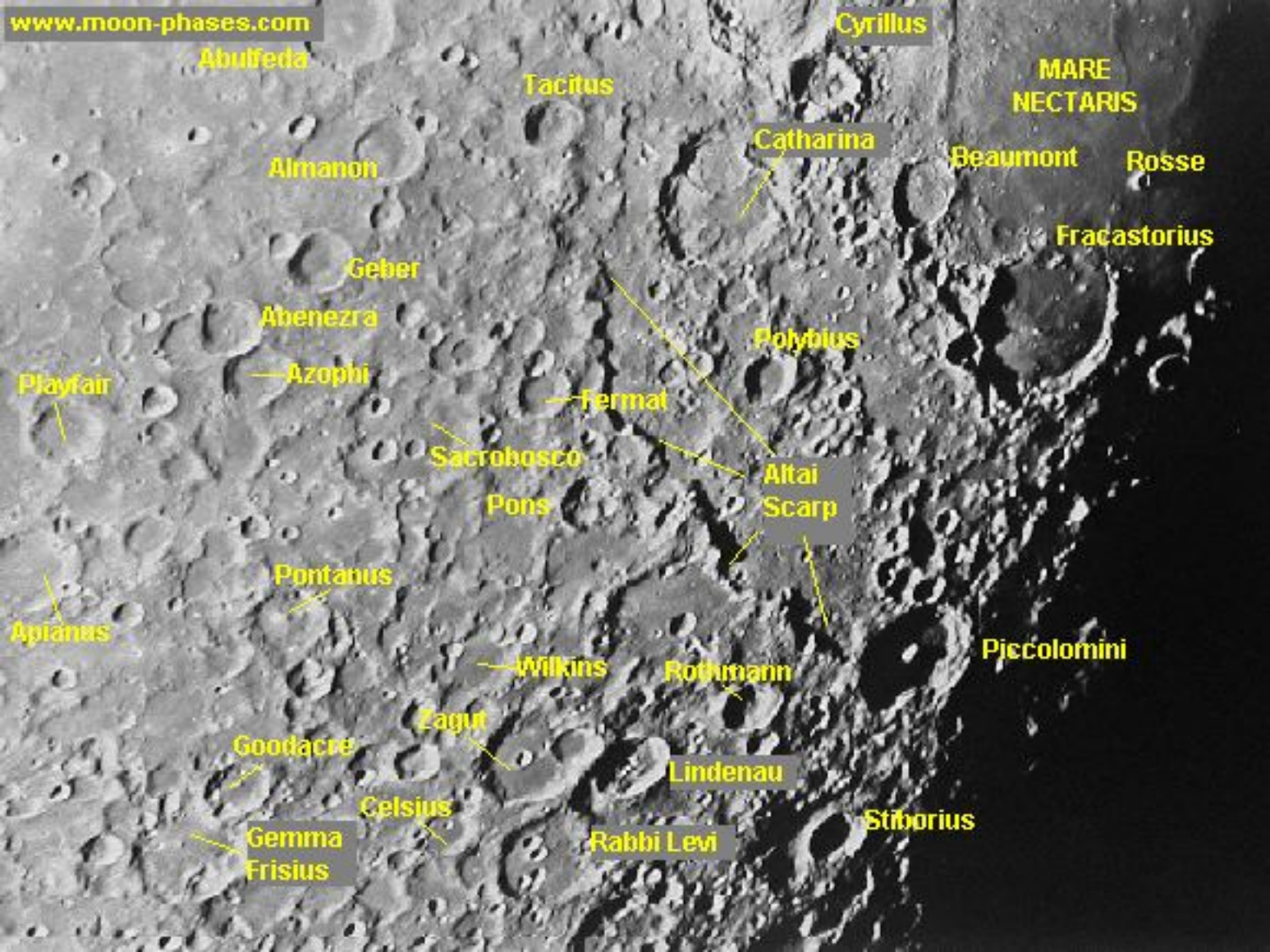
Goodacre

Zagut

Kajser

Celsius

Fernelius



Abulfeda

Cyrillus

Tacitus

MARE  
NECTARIS

Almanon

Catharina

Beaumont

Rosse

Fracastorius

Geber

Abenezra

Polybius

Playfair

Azophi

Fermat

Sacrobosco

Altai  
Scarp

Pons

Pontanus

Apianus

Wilkins

Rothmann

Piccolomini

Goodacre

Zagut

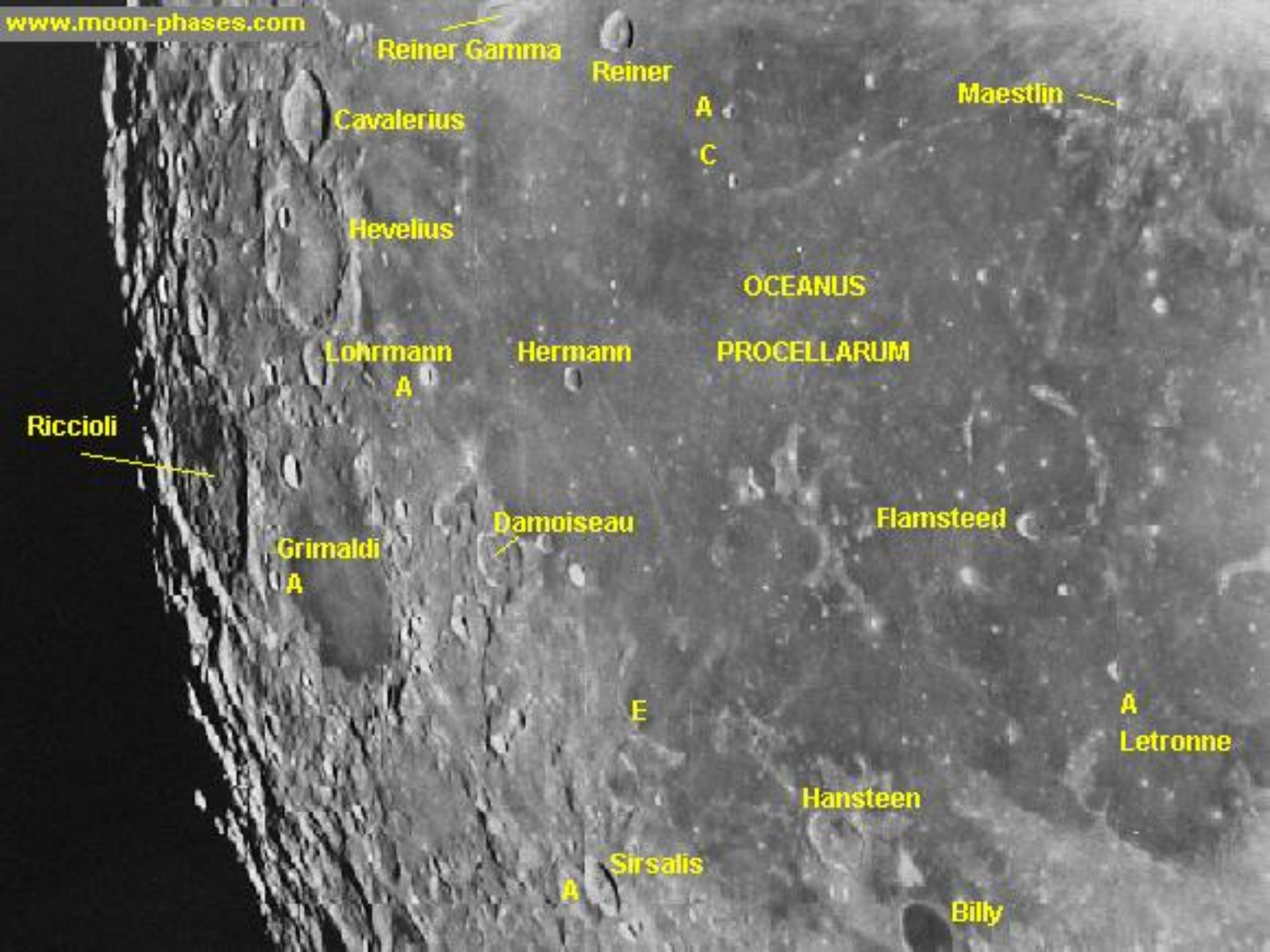
Lindenau

Gemma  
Frisius

Celsius

Rabbi Levi

Stiborius



Reiner Gamma

Reiner

Cavalerius

Hevelius

Lohrmann  
A

Riccioli

Grimaldi  
A

Damoiseau

Hermann

E

Sirsalis  
A

Maestlin

A  
C

OCEANUS

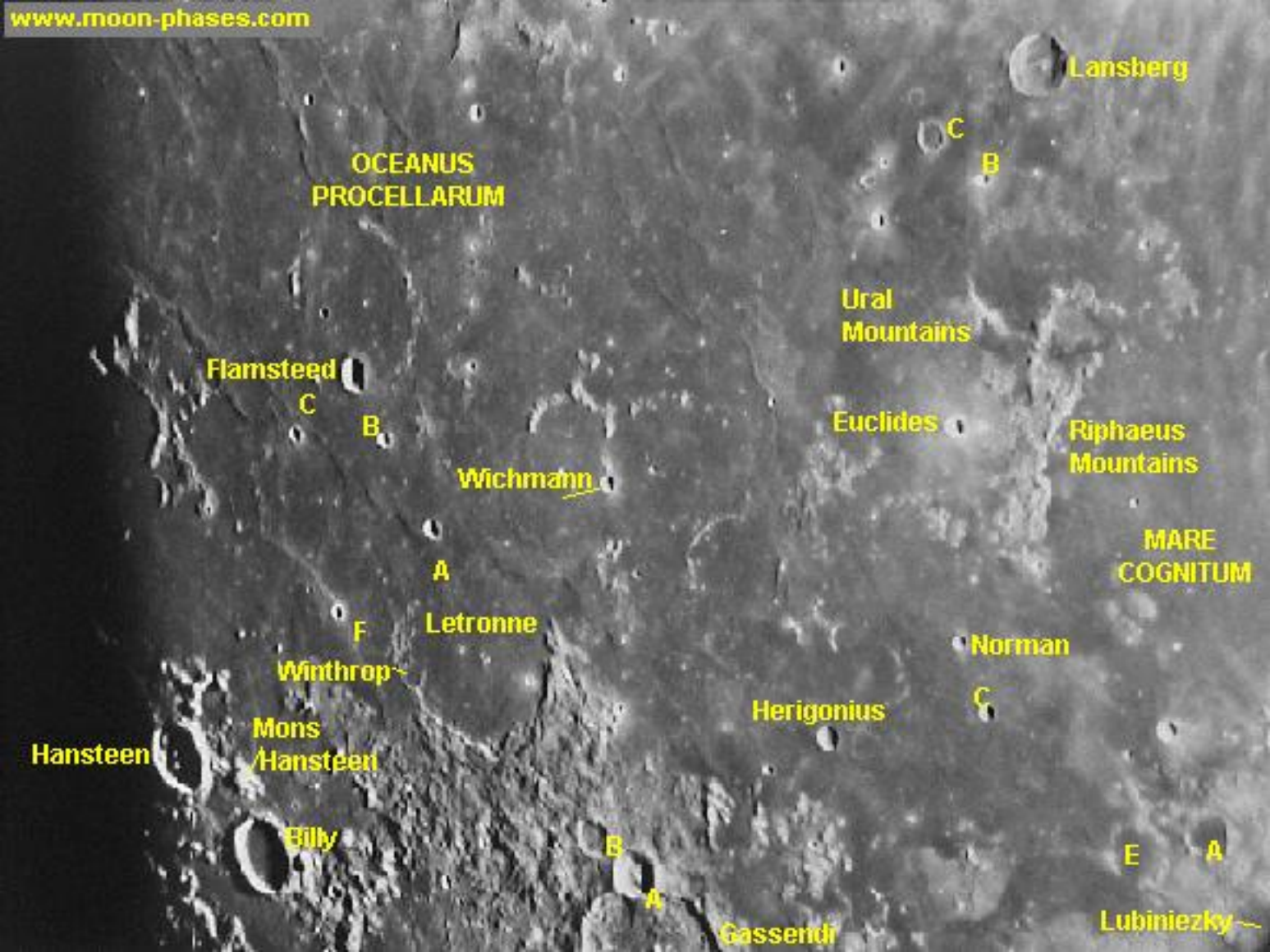
PROCELLARUM

Flamsteed

Hansteen

Billy

A  
Letronne



OCEANUS  
PROCELLARUM

Lansberg

Ural  
Mountains

Flamsteed

Euclides

Riphaeus  
Mountains

Wichmann

MARE  
COGNITUM

A  
Letronne

Norman

F  
Winthrop

Herigonius

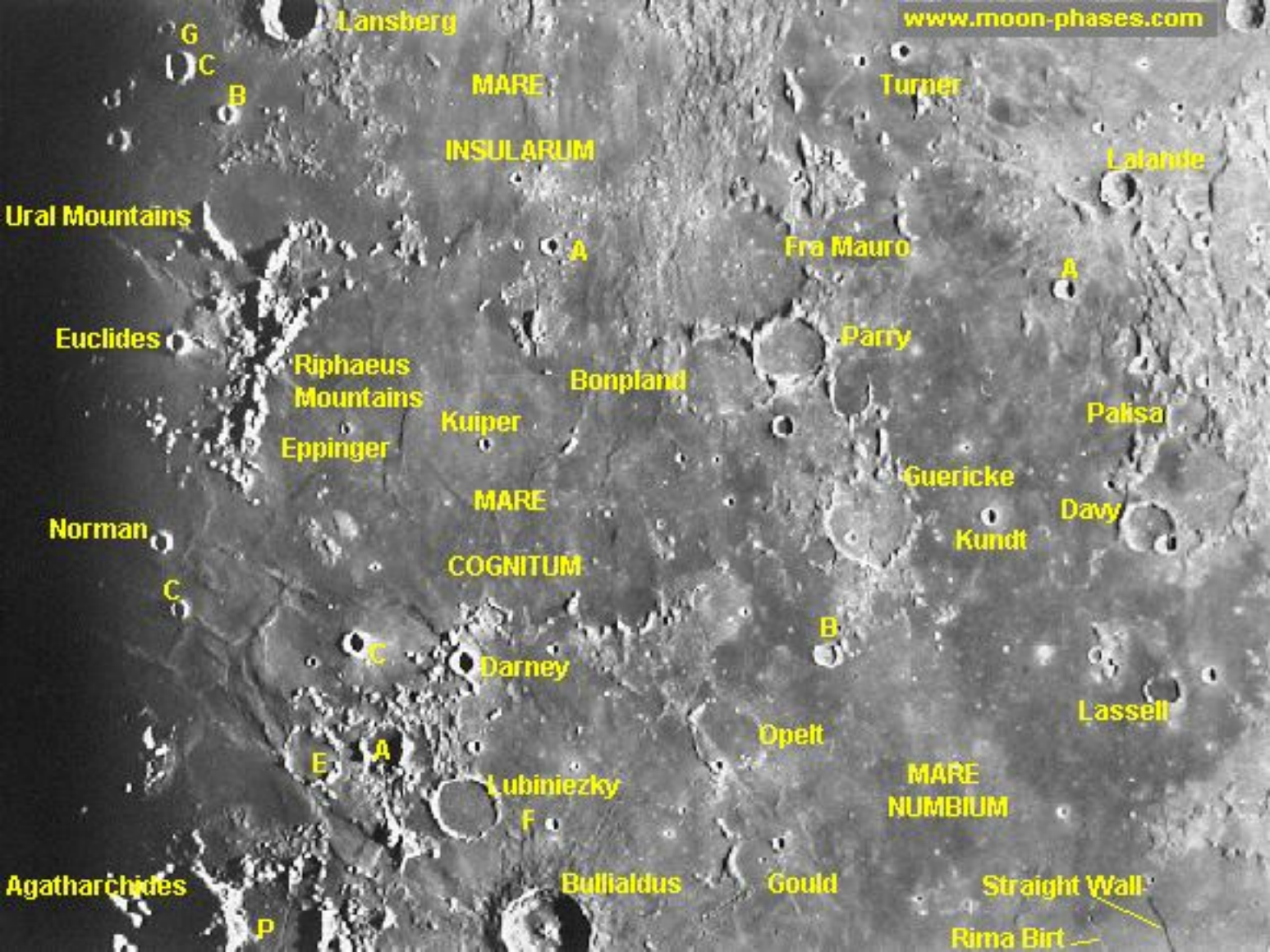
Mons  
Hansteen

Hansteen

Billy

Gassendi

E A  
Lubiniezky



G  
C

Lansberg

MARE

Turner

INSULARUM

Lalande

Ural Mountains

B

A

Fra Mauro

A

Euclides

Riphaeus  
Mountains

Bonpland

Parry

Kuiper

Palisa

Eppinger

MARE

Guericke

Davy

Norman

COGNITUM

Kundt

C

C

Darney

B

Lassell

E

A

Lubiniezký

F

Opelt

MARE  
NUMBIUM

Agatharchides

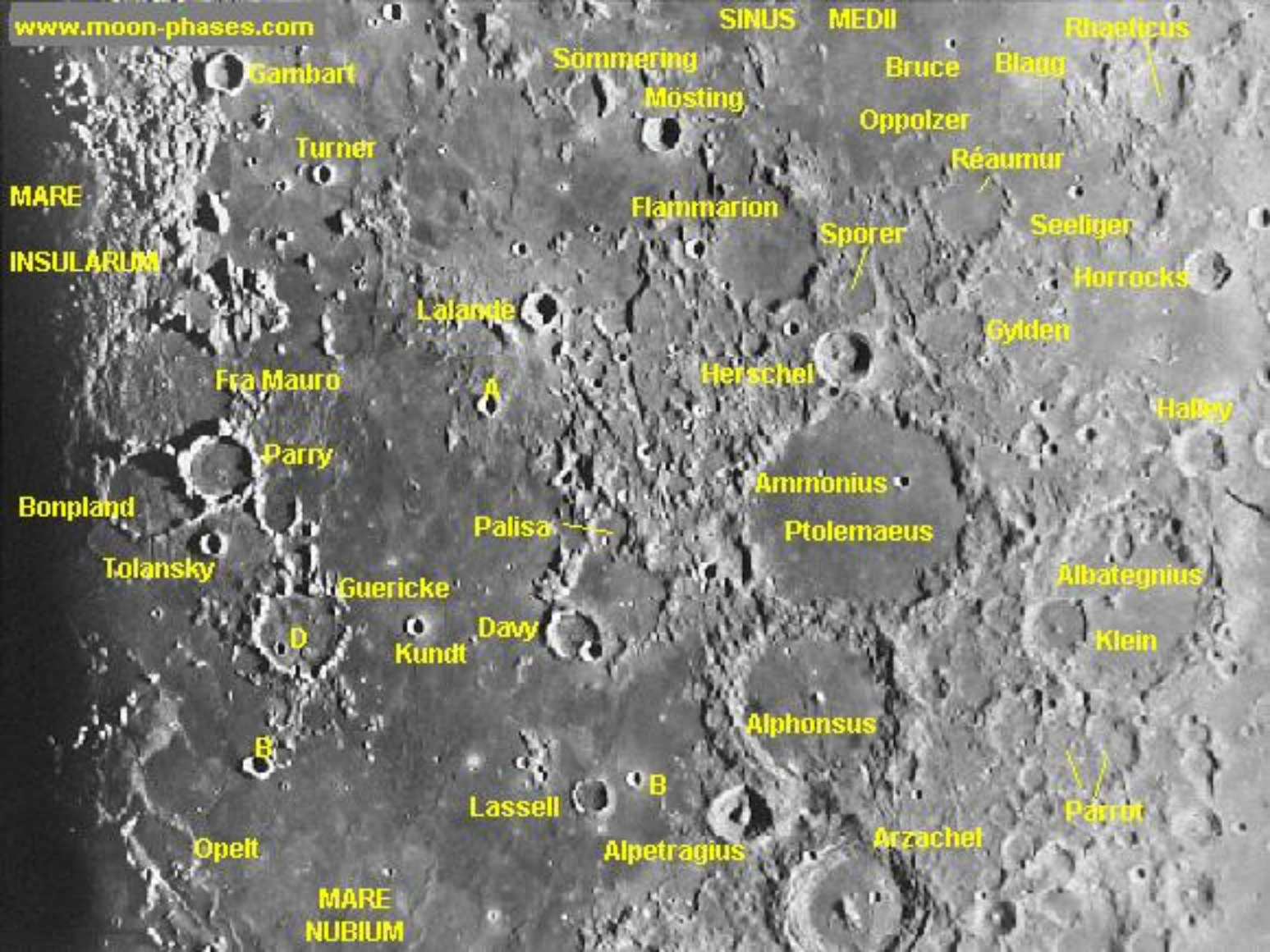
P

Bullialdus

Gould

Straight Wall

Rima Birt



SINUS MEDII

Rhaeticus

Gambart

Sommering

Bruce

Blagg

Mösting

Oppolzer

Réaumur

Turner

Flammarion

Sporer

Seeliger

MARE

Horrocks

INSULARUM

Lalande

Gylden

Fra Mauro

Herschel

Halley

Parry

Ammonius

Ptolemaeus

Bonpland

Palisa

Albategnius

Tolansky

Guericke

Davy

Klein

D

Kundt

Alphonsus

B

Lassell

B

Arzachel

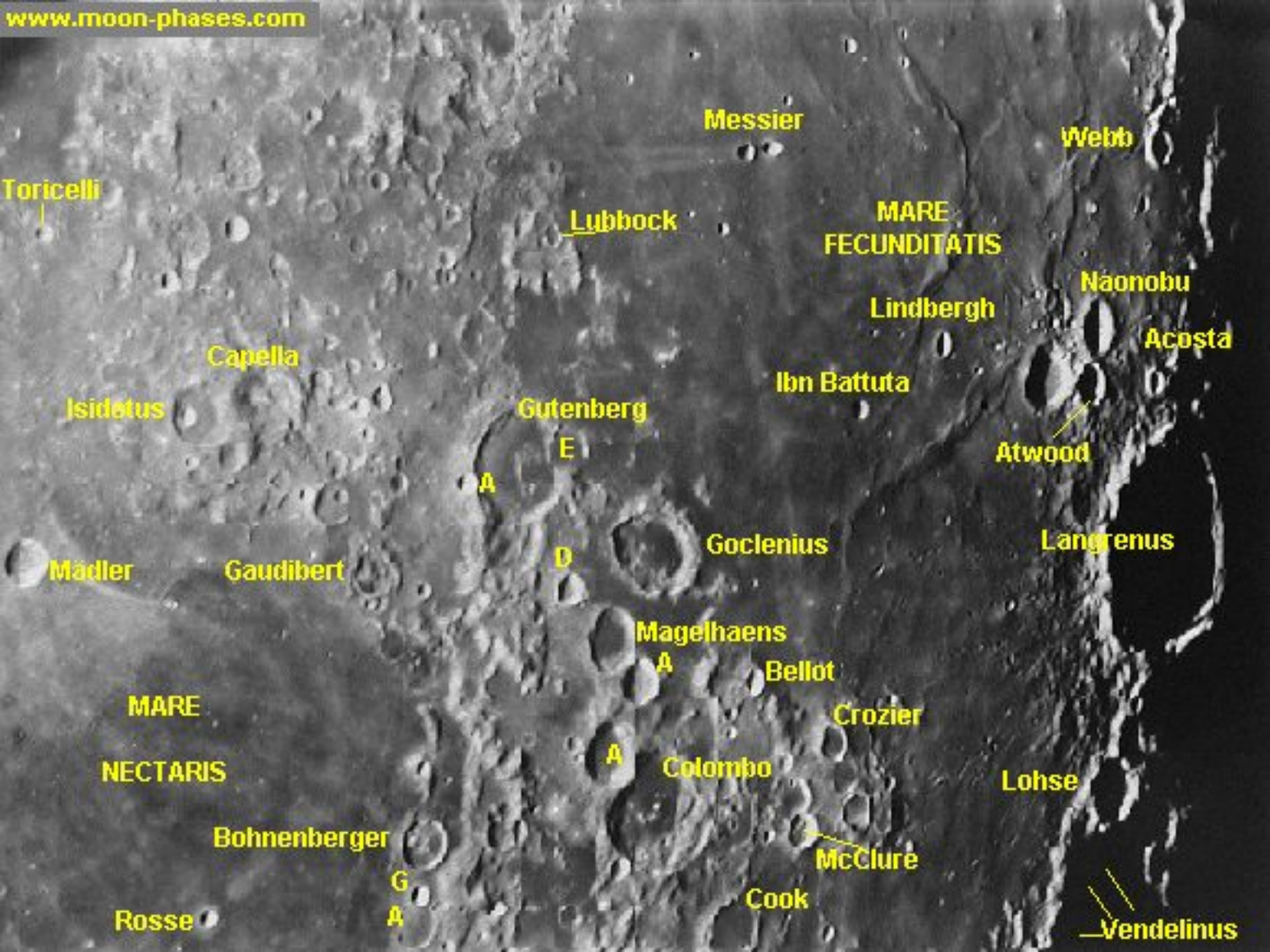
Parrot

Opelt

Alpetragius

MARE

NUBIUM



Toricelli

Messier

Webb

Lubbock

MARE  
FECUNDITATIS

Capella

Lindbergh

Naonobu

Acosta

Isidetus

Ibn Battuta

Gutenberg

Atwood

Mädler

Gaudibert

E

Goclenius

Langrenus

D

Magelhaens

Bellot

MARE

NECTARIS

A

Colombo

Crozier

Lohse

Bohnenberger

G

McClure

Rosse

A

Cook

Vendelinus



*Bilal*