

"... when we reached a large village on the north bank, we seemed to have a lot of daylight still at hand, and thought it better to stay at [a village] higher up, so as to make a shorter day's work for to-morrow, when we wanted to reach Kondo Kondo; so we went up against the bank just to ask about the situation and character of the up-river villages... One chief... took a piece of plantain leaf and tore it up into five different-sized bits. These he laid along the edge of our canoe at different intervals of space, while he told M'bo things, mainly scandalous, about the characters of the villages these bits of leaf represented... The interval between the bits was proportional to the interval between the villages, and the size of the bits was proportional to the size of the village..."

"Now there is no doubt that that chief's plantain-leaf chart was an ingenious idea and a credit to him. There is also no doubt that the Fan mile is a bit Irish, a matter of nine or so of those of ordinary mortals, but I am bound to say I don't think, even allowing for this, that he put those pieces far enough apart..."

Schiff, Barry (1989). *Aeronautical charts; portraits of the earth.* AOPAPilot, March, pp. 78-80, 82. reviewed by Claudette Dellon, Aeronautical Charting Division, NOS/NOAA

Schiff, a pilot, has written a humorous and touching article on his long-standing love affair with aeronautical charts. He views them as pieces of art, portraits of the earth, with which a pilot can "window-shop the world."

A chart is a map modified for use in aerial or maritime navigation and is meant to work on rather than to look at (though some, like Schiff, like to look as well as to work). To maximize the

value of a chart, pilots must learn as much as they can about chart symbology. Schiff feels this can best be accomplished by reviewing the National Oceanic and Atmospheric Administration (NOAA) 112-page booklet, *Aeronautical Chart Users Guide*. To help remember the differences among large- and small-scale charts, he points out that one inch on a VFR terminal area chart (scale 1:250,000), a sectional chart (scale 1:500,000), and a world aeronautical chart, or WAC (scale 1:1,000,000) equals 4, 8, and 16 statute miles respectively.

Covered also is a history of "navigational maps," dating back to 1807 when President Thomas Jefferson established the Survey of the Coast to map our nation's coasts. The Air Commerce Act of 1926 assigned the task of creating charts for air navigation. The first aeronautical chart was published in 1927, the year of Lindbergh's historic flight. By 1930, sectional aeronautical charts were developed to provide coverage for the entire country. Sectionals, at 1:500,000 scale, provide detail needed for visual navigation of slow- to medium-speed aircraft. Those who fly faster and higher don't need as much detail, and this led to the development of regional aeronautical charts (RACs), followed by WACs, and finally, in the 1960's, operational navigation charts (ONCs) published by the Defense Mapping Agency (DMA). RACs, WACs and ONCs are produced at 1:1,000,000 scale.

In 1970 the name of the Survey was changed to NOAA, of which the National Ocean Service (NOS) is charged with publishing and distributing aeronautical charts. Chart products are described in NOS's free catalog, *Aeronautical Charts and Related Products*, available from NOAA Distribution Branch, N/CG33, NOS, Riverdale, MD 20737.

In addition to producing ONCs,

DMA produces visual jet navigation charts (JNCs) at 1:2,000,000 scale. Only 122 JNCs are required to cover the entire world, with three covering the continental U.S. The kings of visual charts are the global navigation charts (scale 1:5,000,000') developed for very long range aircraft navigating at very high altitudes. For a free catalog of these and other charts, contact the DMA Combat Support Center, ATTN: PMA, Washington, DC 20315-0020.

Schiff is also fascinated by charts produced by foreign governments. He considers some to be real works of art. The excitement this collector and art lover feels for aeronautical charts is contagious.

cartographic artifacts

ALBUM OF MAP PROJECTIONS
USGS Professional Paper 1453 entitled "An Album of Map Projections" by John Synder and Philip Voxland has been prepared to acquaint those in the cartographic profession with the wide range of map projections that have been developed during the past few centuries. Ninety basic projections are presented with consistent and concise textural descriptions and are accompanied by standardized, visual portrayals.

USGS MAP DISTRIBUTION
The USGS/GPO cooperative map project has been operating for over four years since its inauguration in October 1984. USGS consolidated its eastern and western map distribution facilities into Building 810 in the Denver Center in 1986 in order to realize an annual cost savings of over \$1 million. During the consolidation, 3700 tons of maps and books were delivered to Denver in 185 truckloads.

Building 810 offers some seven-