1131.00 **Spool-wrapping of Tetrahedron**

1131.10 **Omnitriangulated Strip**

1131.11 Another model is the omnitriangulated strip tape whose width exactly equals the altitude of the regular tetrahedron's triangular face. This strip's surface has been entirely divided into a series of equilateral triangles, each of whose edges are of the same length as any edge of the regular tetrahedron. Employing this wavilinear-faced tape, we can completely and successively spool-wrap the entire surfaces of all four faces of the tetrahedron while also wrapping four of the tetrahedron's six edges and exactly paralleling the wrapping tape along the other two edges of the tetrahedron. None of the four vertexes are embracingly wrapped, but all of them are tangentially wrapped.

1131.12 The tetrahedron so wrapped has a wrapping axis running through, and perpendicular to, the midpoints of the two unwrapped edges of the tetrahedron spool. Being a regular tetrahedron, this spool may be used as a roller printing device, when its fixes are inked, to make a continuously printed strip of edge-to-edge equilateral triangles. Ergo, we have a device for projecting all of the omnidirectionally occurring and tetrahedrally observed data onto a minimum-surface system that is unwrappable onto a flat ribbon printout with four-dimensional coordination. In this method of projection the observer's viewpoint always remains perpendicular to the outside surface of the system, as in the Dymaxion map projection, where any star remains in exact perpendicular zenith to the corresponding point on the map of the world, whether the map is stretched in one flat plane or whether it is the surface of complete unitary sphericity. The same triangles are going to come out flat and the same stars are in exact zenith over their respective points, as the radii remain perpendicular to the system independent of whether the triangular area edges are arcs or chords.

1131.13 The omnitriangulated strip is an extraordinary mathematical transformation in which you can graphically accommodate the omnidirectionality of all systems in an exactly coordinated mathematical accounting. It can project and print out on a strip all gravitational and radiational data, be they in the form of stars, fishes, or anything. They are all coordinatably print-outable onto one continuous flat ribbon map. What we have is a true prototype of an *omnidirectional typewriter*. It can print out each omniembracing layer of each frequency layer of each convergent-divergent system. When you print out the omnidata on such a strip, it identifies specifically where and when each event in the transformation occurs.

1132.00 **Great-circle Shunting and Switch Points**

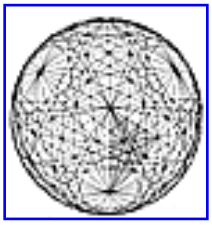

Fig. 1132.01B

1132.01 This omnidirectional, convergent-divergent, systems-reporting device can print out the most-economical-interrelationships trackings and information-coordinating routings of all systems, because it embraces the pattern of all 87 of the most economical and only available great-circle railroad tracks and no-loss-holding stations of energetic Universe; i.e., through all the closest-sphere-packed systems; i.e., through all the isotropic vector matrixes. In other words, if you want to go from here to there in Universe in the quickest and most economical way, while stopping over here and there for indefinite periods at no-extra-cost hotels, you have got to go through the 12 points of intertangency of the 25 great circles of fundamental symmetry that apply to all the atoms and their association in all seven of the fundamental symmetry subsets.

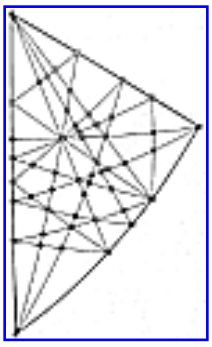

Fig. 1132.01C

1132.02 The 31 great circles of the icosahedron always shunt the energies into local- holding great-circle orbits, while the vector equilibrium opens the switching to omniuniverse energy travel. The icosahedron is red light, holding, no-go; whereas vector equilibrium is green light, go. The six great circles of the icosahedron act as holding patterns for energies. The 25 great circles of the vector equilibrium all go through the 12 tangential contact points bridging between the 12 atomic spheres always closest packed around any one spherical atom domain.

1132.10 **Great-circle Railroad Tracks of Energy**

1132.11 Each of the 25 great circles of any one closest-packed sphere can be used by that special local sphere as an "until-ready," local shunt-off, holding circuit track for any traveling energy entity. This is permitted by the fact that each and all of the 25 great circles are foldable into local, bow-tie, clover-leaf, figure-eight, ``chain-of-sausages," three-or-four-bladed-propeller-type patterns which, when totally interassembled, also provide full, uninterrupted, 360-degree, around-the-sphere circuitry. The energy entities can travel around locally on any one sphere's holding tracks in these local 360-degree total shuntings for as long as is "convenient" to the system.

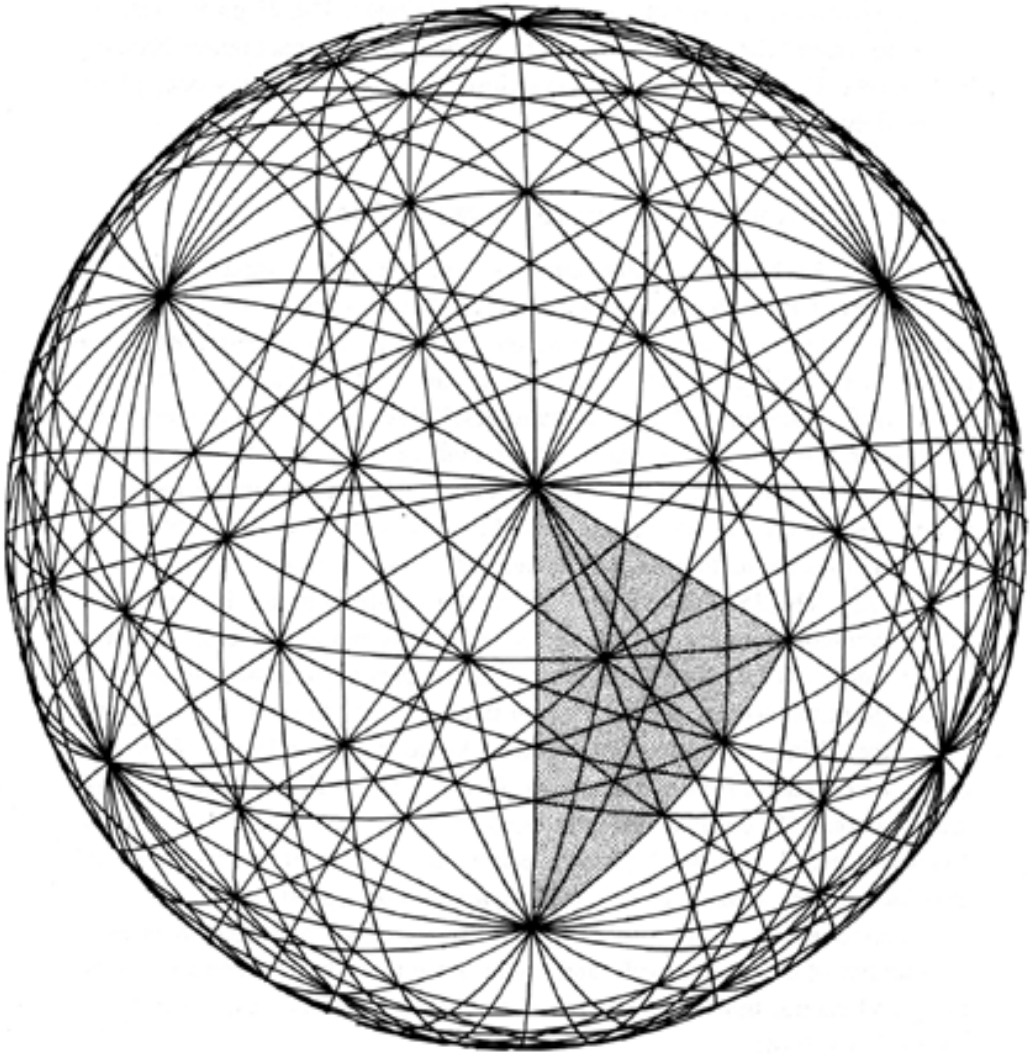

Fig. 1132.01B Composite of Vector Equilibrium and Icosahedron Great Circle Sets: This is a black-and- white version of color plate 32. The Basic Equilibrium 48 LCD triangle appears here shaded in the spherical grid. In this composite spherical matrix we see all the 25 primary vector equilibrium great circles and two sets skewed-positive and negative of the icosahedron 31 great circle sets. (31 ' 2 = 62. 62 + 25 = 87. But 14 of the 87 are redundant.) Four of the VE great circles are congruent with four of the icosa's 10-great circle set. Three of the VE great circles are congruent with three of the icosa's 15-great- circle set. Thus seven positive are redundant and seven negative are redundant. (87—14=73.) There are 73 great circles in the composite set. (See color plate 32.) This composite shows the vector equilibrium great circles and the icosahedron great circles in the two alternate ways of pumping the VE jitterbug pattern.

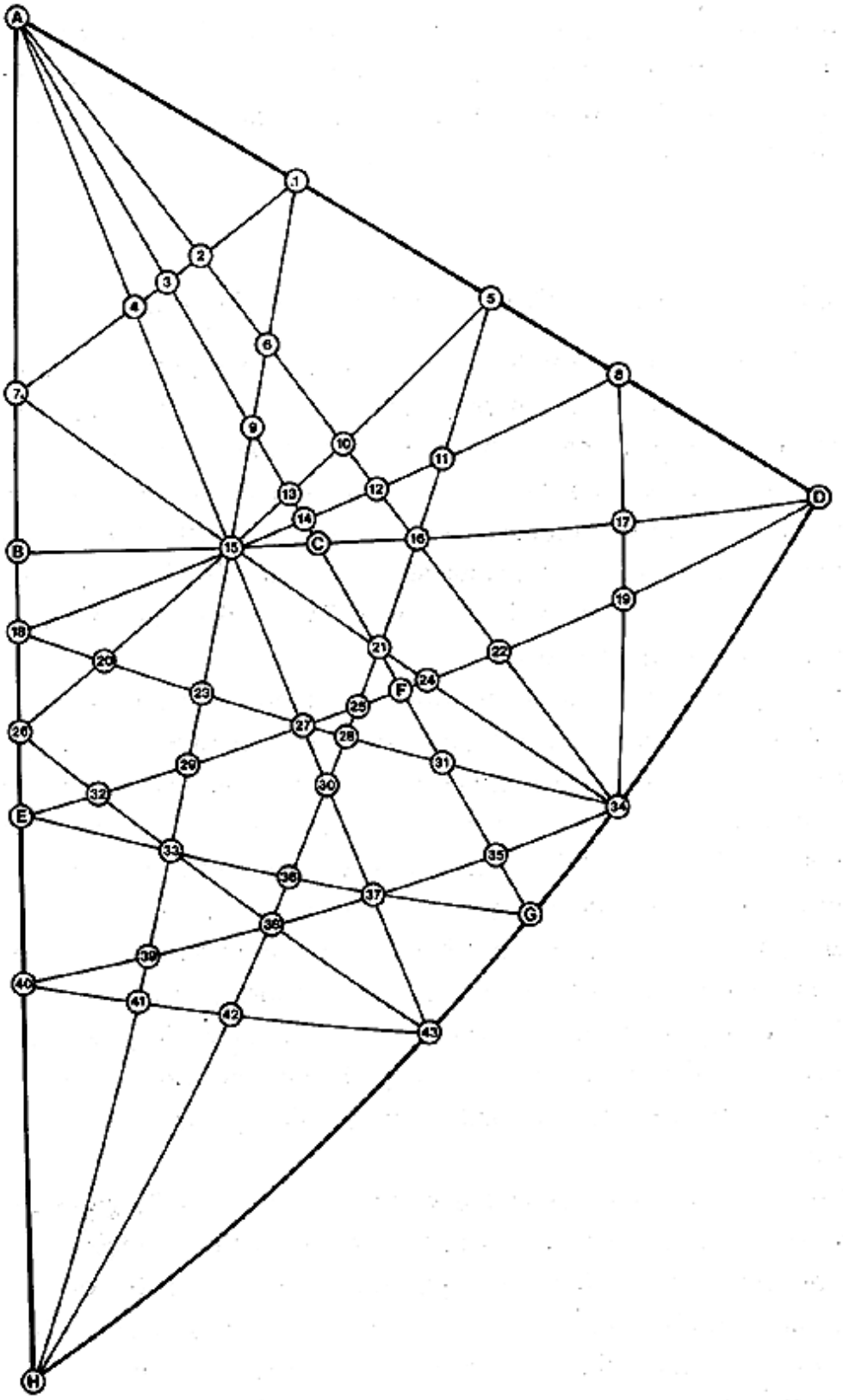

Fig. 1132.01C Net Diagram of Angles and Edges for Basic Equilibrium 48 LCD Triangle in VE-icosa Grid: This is a coded detail of the basic spherical triangle shown shaded in Fig. 1132.01B and at Fig. 453.01. It is the key to the trigonometry tables for the spherical central angles, the spherical face angles, the planar edge lengths, and the planar face angles presented at Table 1132.01D. (The drawing shows the spherical phase: angle and edge ratios are given for both spherical and planar VE.)

1132.12 The 25 great circles of the vector equilibrium are the only omni-intersystem- connecting "railroad tracks" of energy in the Universe. When an energy entity holding locally on a local sphere gets a green light to get back on the grand-omni-interspheres' system tracks, it can do so by crossing over one of the 12 inter-atomic-sphere bridges. As we have seen in Sec. 450, three of the vector equilibrium's four unique sets of great circles, whose respective numbers total 25, disclose different rates of encounter with the tangential "Grand Central Stations" through which the energy-entity travelers can transfer to other spheres of the omni-equiradiused, closest-packed-spherical-dynamics domains of any one elemental atomic class. Arranged in order of the number of encounters with (and entries into) the sphere-to-sphere, tangential grand-central transfer points per each great-circle cycle, they may be accounted as follows:

6	great circles go through	2	points per 360° cycle
3	" " " "	4	" " "
12	" " " "	4	" " "
4	" " " "	6	" " "
25	shunt holding	16	transfer opportunities circuits per each spheric moment, of which only 12 can be accommodated

1132.13 Because only 12 of 16 station transfers can be accommodated, each sphere has inherently eternal retention of four energy entities. Four energy entities comprise the minimum system-defining constellation—i.e. the tetrahedron—which is exactly one energy quantum. Thus we see that the 16 potential encounters of the 25 great-circle sphere may be identified as 16/4=4 energy quanta, of which only three may be accommodated at the exits: wherefore a fourth quantum is always retained. No sphere or atom can be exhausted.

1133.00 **Information Control System of Universe**

1133.01 In the vector equilibrium's total of 25 great-circle circuitings, we find at any one moment four different sets of great-circle holding patterns and four energy quanta per sphere, but with exit accommodation for only three quanta. With all these beautiful local holding-circuit switches and stop-and-go controls we begin to comprehend conceptually the method by which nature can shunt, valve, hold, and transmit all information in Universe. This is the information-control system of the Universe. This is the way spheres transmit through closest-packing patterns.

1133.02 This is why transistors work; it explains why somebody was suddenly able to discover that a tiny piece of metal embraced an energy-quanta valving system having reliable regularities. Science unthinkingly spoke of this phenomenon as "solid state physics," partially because individual humans could not see those beautiful little atoms and electrons doing their acts on their railroad tracks and their respective local great-circle energy holding patterns, and partially because science has been flying blind on instruments. For over a century science has been maintaining stubbornly that there was nothing to see by looking out of the windows. They said nature does not use models in the invisible microcosm; she uses only abstract equations. This "nonconceptuality viewpoint" was fortified to the public by use of the term "solid state physics."

1133.03 In the behaviors of the vector equilibrium's 25 great circles we have the basis for the design of a nuclear omnidirectional typewriter, a programmable computer smaller than a pinhead, which is capable of storing, retrieving, and printing out all humanly acquirable information. Synergetics mathematics has the ability to convert the spherically arranged information and project it onto flat conceptual-information-printout arrays of negligible distortion. The least-possible-distorted transformational projection is icosahedral treatment employed in the Dymaxion airocean world map system. The simplest frame of reference, however, is that of the spherical tetrahedron, which transforms into the flat, omnitriangulated-grid, strip-wrapped, four-dimensionally- symmetrical tetrahedron. The tetrahedron produces a conveniently linear, four-dimensional roller printout.

1133.04 These transformational projections afford the most economical, least distorted means of translating the symmetrically omnidirectional into a flat symmetrical projection. The prime structural system of Universe, the tetrahedron, unwraps linearly to print out all possible variations of angle and frequency modulation. Here we have a conceptualizing model that can be reliably programmed to conceptualize atomic structurings at humanly discernible magnitudes. This kind of atomic-level behavior is exactly what all the computer model specialists have been missing—ergo, the magnitude of the chasm between their projective equation strategies and synergetics' four- dimensional conceptual integrity independent of size and its inherent ability to deal discretely with closest-packed atomic system proclivities and behaviors.

Next Chapter: 1200.00
