THE STRUCTURE OF GENERALIZED ACCESSIBLE RINGS

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In [3] Schafer has defined *generalized standard rings* as rings satisfying the identities

$$(x, y, x) = 0 \tag{1}$$

$$(x, y, z)x + (y, z, x)x + (z, x, y)x = (x, y, xz) + (y, xz, x) + (xz, x, y) \tag{2}$$

$$(x, y, wz) + (w, y, xz) + (z, y, xw) = (x, (w, z, y)) + (x, w, (y, z)) \tag{3}$$

and observed that these identities imply

$$(y, y, (x, z)) = 0, \tag{4}$$

and for characteristic not three

$$(x, y, x^2) = 0. \tag{5}$$

Schafer determines the structure of simple, finite-dimensional generalized standard algebras of characteristic not 2 or 3 by showing that they must be either commutative Jordan or alternative.

Previously one of the authors [2] had studied *accessible rings*, which are defined by the identities

$$(x, y, z) + (z, x, y) - (x, z, y) = 0 \tag{6}$$

and

$$((w, x), y, z) = 0. \tag{7}$$

The structure of accessible rings is determined in that paper as it turns out that an accessible prime ring must be either associative or commutative.

Both of these results generalize some results on standard algebras by Albert [1].

In the present announcement we define an even more general class of rings called *generalized accessible*, as those satisfying the identities

$$(x, (z, y, y)) = 0, \tag{8}$$

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