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**Oscar E Vega\*** (ovega@csufresno.edu), 5245 North Backer Avenue M/S PB 108, Fresno, CA 93740, and **Esteban M Diaz**. *Translation planes admitting a linear Abelian group of order  $(q + 1)^2$ .*

Under the conditions of  $q$  being an odd prime power and  $q^2 - 1$  having a  $p$ -primitive divisor, we have shown that translation planes of order  $q^2$  with kernel containing  $GF(q)$  that admit a linear Abelian group of order  $(q + 1)^2$  containing at most three kernel homologies must be associated to a flock of a quadratic cone. (Received September 21, 2009)