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**Joseph W. Iverson\***, Department of Mathematics & Statistics, Air Force Institute of Technology, 2950 Hobson Way, Bldg 641, Wright Patterson AFB, OH 45433. *Group frames with several generators.*

When a compact group acts on a Hilbert space irreducibly, the orbit of any single nonzero vector forms a tight frame. When the action is not irreducible, the situation is considerably more complicated. This is especially true if one wants to use multiple generating vectors and make a frame from the disjoint union of their orbits. We tackle both generalizations at once, and give a neat duality result that captures the result for irreducible representations under the same umbrella as the familiar duality of frames and Riesz sequences. (Received January 18, 2016)