Exercise 21 solution: Suppose $o(\theta, f)$ is dense in $\mathbf{T}$. Let $x_0 \in \pi^{-1}(\theta)$. As in the solution of Exercise 8(b), $eo(x_0)$ is dense in $\mathbf{R}$. Define $\overline{H} : eo(x_0) \to \mathbf{R}$ as in Proposition 2, and $H : \mathbf{R} \to \mathbf{R}$ as in the proof of Proposition 3. If H is not a homeomorphism, pick an interval J on which H is constant. Since $eo(x_0)$ is dense in $\mathbf{R}$, pick $x_1, x_2 \in eo(x_0) \cap J,\ x_1 < x_2$. Then $H(x_1) < H(x_2)$ by Proposition 2, contradicting the fact H is constant on J. Hence H is a homeomorphism, f is conjugate to r_α, and all orbits of f are dense in $\mathbf{T}$.