63. (a) Using the notation of Sample Problem 37-6 (which is in the textbook supplement), the minimum separation is

$$D = L\theta_{\mathrm{R}} = L\left(\frac{1.22\lambda}{d}\right) = \frac{(400 \times 10^3\,\mathrm{m})(1.22)(550 \times 10^{-9}\,\mathrm{m})}{(0.005\,\mathrm{m})} \approx 50\,\mathrm{m} \ .$$

(b) The Rayleigh criterion suggests that the astronaut will not be able to discern the Great Wall (see the result of part (a)).

(c) The signs of intelligent life would probably be, at most, ambiguous on the sunlit half of the planet. However, while passing over the half of the planet on the opposite side from the Sun, the astronaut would be able to notice the effects of artificial lighting.