

**STATEMENT OF COL. G. E. TEXTOR, CORPS OF ENGINEERS,
UNITED STATES ARMY**

Mr. RANKIN. Colonel Textor, on yesterday we were discussing the question of the submarine menace in connection with the open Gulf route from Carrabelle to Port Inglis. As I understand it, the route that the ships could take there has a 12-foot depth. Is that right?

Colonel TEXTOR. Yes, sir; that is right.

Mr. RANKIN. How close could submarines come to land there and be submerged?

Colonel TEXTOR. They could not come very close. Submarines, so far as I can learn from people who know about them, require at least 16 feet of water in which to navigate on the surface.

Mr. RANKIN. On the surface?

Colonel TEXTOR. Yes, sir; that is when they are navigating on the surface as surface craft. When they submerge so as to be invisible from aircraft, they should have a minimum of 60 feet depth. I think they like to go much deeper than that. The 60-foot contour line is considerably off the coast of Florida.

Mr. RANKIN. How far is it?

Colonel TEXTOR. An average distance of about 30 miles.

Mr. RANKIN. So that a submarine, in order to be safe, or to be submerged so it would be out of sight of vessels on the surface or aircraft, would have to stay 30 miles off the coast?

Colonel TEXTOR. That is essentially correct, for most of the coast line.

Mr. RANKIN. How far could a submarine send a projectile that would destroy one of these barges?

Colonel TEXTOR. I am not competent to answer that question, but I would estimate such range to be not more than 3 miles.

Mr. RANKIN. I think somebody from the Navy Department said it would be somewhere between 3 and 3½ miles. Now, in order to be safe, they would have to stay out at least 30 miles from land, because if they were on top of the surface they could be seen from the coast.

Colonel TEXTOR. Yes; if they come too close to the shore.

Mr. RANKIN. In order to be safe and to keep out of sight of airplanes patrolling the area, how deep would the water have to be in which the submarine was operating?

Colonel TEXTOR. It would have to be a minimum of 60 feet.

Mr. RANKIN. It would have to operate in a minimum of 60 feet of water in order not to be seen from the surface; but I mean where it could descend or submerge to a point where airplanes could not discover it.

Colonel TEXTOR. I am told that it would require at least 100 feet to make a submarine completely invisible to aircraft.

Mr. RANKIN. Somebody in the Navy Department told me that if they did not have a depth of 120 feet in which to operate they could not keep from being observed from the air.

Colonel TEXTOR. That would appear to be reasonable.

Mr. RANKIN. So far as submarines are concerned, would you consider that this route would be fairly safe for barges?

Colonel TEXTOR. That would be my opinion, if the barges operate generally along the 12-foot underwater contour.

Mr. RANKIN. That is, it would be safe from attack by submarines?