

Pollution of Chedabucto Bay

This means, in the view of the scientists, that no significant damage has yet been done to fish and other forms of underwater life. Some of the oil appears to have been driven seaward. Traces have been found 25 miles off shore and to a water depth of 50 meters. These traces are not sufficient in size to be harmful. The major concentrations, therefore, are along the shores of the bay, with accumulations in some areas much greater than in others. There is also, of course, the oil remaining in the two sections of the broken hull still on the rock.

Many sections of the shoreline are entirely clean, but the nature of the oil is such that some of it is moved about by wind and tide. This explains why various estimates of the amount of shoreline affected differ from day to day.

The project group has confirmed the earlier assessment I gave the House that the biggest single threat continues to be the amount of oil still in the wreck. This could be close to twice as much as has leaked out already. Therefore the group will continue the total effort to remove this oil as quickly as possible. At the same time, however, work will proceed on cleaning up the shoreline, with particular emphasis on the protection of the fish plants located in the area.

Thanks to the very great efforts of all who have been on this difficult project from the beginning, the placement of booms and other devices has kept the harbours where the plants are located virtually free of contamination. This work will continue and be intensified. Incidentally, all fish brought to these plants are caught on the Grand Banks or other offshore fishing grounds well removed from the affected area.

The project group has devised a number of different approaches to the clean-up problem. This is because existing conditions, which permit the use of certain techniques, may be changed by weather conditions or other factors. For example, a further assessment of the condition of the hull is now being carried out by navy divers. Best evidence to date is that the forward part of the broken ship is reasonably stable but that there is some movement in response to wind and tide action. The rear section, which is thought to contain a larger quantity of oil, is on a ledge, is not stable and could slide off into a nearby trench about 150 feet deep.

If the two halves remain as at present, salvage may be possible. Then the two sections could be towed away either into a shel-

tered area, where cargo removal would be easier, or well out to sea and sunk. If salvage is impossible, and this is the more likely prospect, special equipment will be used to pump the oil from the hull. This equipment has had to be manufactured for the purpose and is now being tested. When the oil is extracted it may be possible to pump it into barges, but an alternative solution would be its release in controlled quantities followed by containment and disposal. This could be accomplished either through burning or the absorption of the oil into other substances, such as sawdust, peat moss or other highly absorbent materials. Sawdust, incidentally, absorbs about five times its weight in oil, peat moss up to ten times its weight. These two materials will also be used in cleaning up the shoreline.

Mr. Forrestall: Why did you not burn the oil?

Mr. Jamieson: The first task here is to move the spilled oil now along the shore up beyond the high-water mark. For this purpose bulldozers are being used and, since there is no road access to much of the area, this equipment, in many cases, must be brought in by barges from the seaward side. Of course, a good deal of manpower must also be used in the exercise. In this connection the Armed Services have provided excellent co-operation to date, and their help will be invaluable in this aspect in the weeks to come.

As regards destruction or removal of the oil pollution, the use of peat moss, sawdust, straw and other materials is preferable to the use of chemicals which can have a long-term detrimental effect, as the *Torrey Canyon* incident showed. We have also been testing new chemicals which have been developed since the *Torrey Canyon*.

As I have stated previously, the biggest ongoing danger is that the hull may deteriorate further thus releasing more oil. If this were to happen then, even though the beaches had been cleaned, the task would have to be undertaken again. This is why the problem with the wreck is being dealt with on an urgent basis. No great quantity of oil is now leaking from the two hull sections, but undoubtedly some is escaping as the stern section in particular moves about.

The task has been, and will continue to be, long and difficult. As has been stated publicly by many people, those who have been working at the scene deserve great credit for their all-out effort under very trying and danger-