# MASSACHUSETTS INSTITUTE OF TECHNOLOGY DEPARTMENT OF OCEAN ENGINEERING

13.811 Advanced Structural Dynamics and Acoustics

## Second Half - Problem Set 3

Assigned : 5 May 2004

Due : 12 May 2004

## Problem 1

Earl G. Williams Problem 6.16

## Problem 2

Repeat Problem 1 for rigid sphere

## Problem 3

Sketch the polar plot of the target strength using low frequency approximation for problems 1 and 2 with the following parameters:

Sound speed : 1500 m/s

Sphere radius : 1 m

Frequency : 25 Hz

## Problem 4

Earl G. Williams Problem 4.1