Scenario: Manned weather station

Sound 1: High-pitched single beep
This beep was designed to fit in with peoples' existing expectations of feedback on user operations (eg, the beeps on ATMs, on computer operations.) Since this would be sounded quite often, I made sure it was set at a relatively low volume.

Sound 2: Low-pitched ‘dun-dun’
This is for letting the user know that their last command or operation failed. The tritone was put in to make the sound seem discordant, and the notes are separate to make sure the user hears it properly.

Sound 3: Lower pitched, but rising alarm
This sound is for alerting the users to incoming emergencies on their computers, rather than emergencies to the station itself. Thus, while it is reminiscent of an alarm, I tried to make it less immediately stressful. One way of doing this is to make sure the sound repeats no more than 1 time a second. As the emergency gets closer, it will repeat slightly more often.

Sound 4: Higher pitched, but descending alarm
This sound is for emergencies within the station itself. It is higher-pitched than the other alarm, slightly louder, and repeats more quickly, in order to alert the users faster. What's more, it will be coming from a different direction than the computers (ie, from a special speaker more easily.

Sound 5: 'Stammering' low-pitched note
This note is to tell the user that a complicated operation completed successfully. It is designed so that, if played soon after the 'dun-dun', it will 'complete' or 'satisfy' the tri-tone, by being pitched right.

All sounds were generated with ProTools, mainly with the Vacuum plug-in, and slightly edited using Audacity.

The simulation involves all the sounds being heard at least once, in the general scenario of some disaster (eg, a fire) gradually bearing down on the station. It simulates three computers and their sounds, in different locations. The simulation was created using Audacity, simply by picking and choosing the sounds as required, with silence in between.