

Anatomy of a Catastrophic Boiler Accident



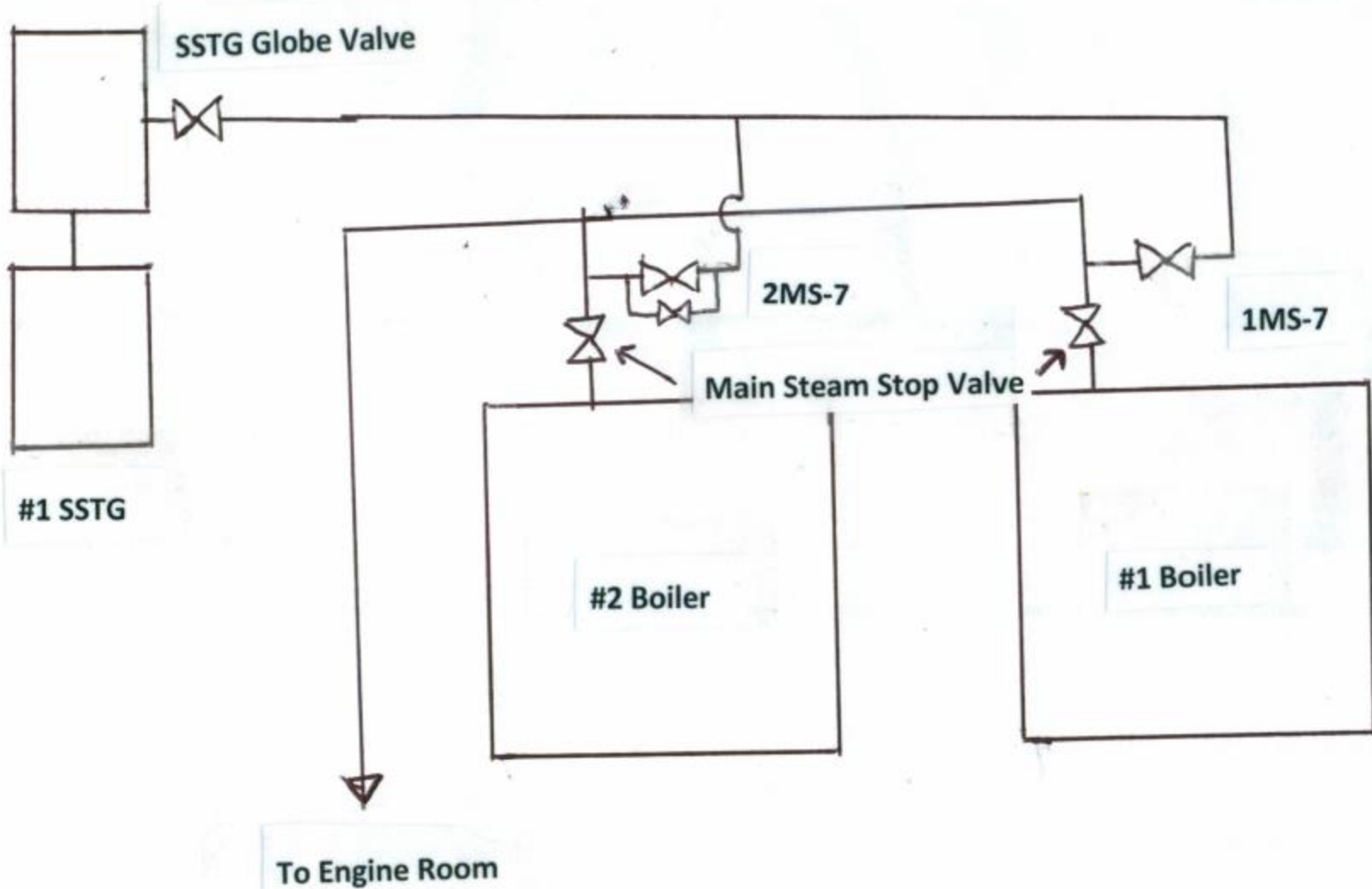
Routine Repairs Turn Tragic



Reporting The Situation



Basic Sketch of Boiler Room Lay-out



NOTE: Main Steam means Superheated Steam

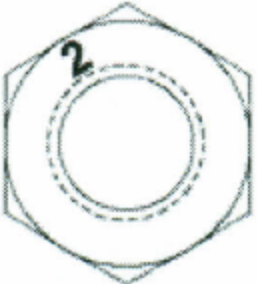



Examples of Valve



**My Role As Inspector.
What I Saw Changed My Life
Forever**

Speculating The Cause Of The Accident

Mechanical Properties Grade Identification Markings

Grade Identification Marking ⁵	Specification	Material	Nominal Size, In.	Tempering Temp. °F	Proof Load Stress, ksi	Hardness Rockwell		See Note
						Min	Max	
	ASTM A194 Grade 2	Medium Carbon Steel	1/4 - 4	1000	150	159	352	1,2,3
	ASTM A194 Grade 2H	Medium Carbon Steel, Quenched and Tempered	1/4 - 4	1000	175	C24	C38	1,2
	ASTM A194 Grade 2HM	Medium Carbon Steel, Quenched and Tempered	1/4 - 4	1000	150	159	237	1,2,3
		Medium						

LIVING IN THE AFTERMATH

*If Something Doesn't Look Right...It
Probably Isn't*