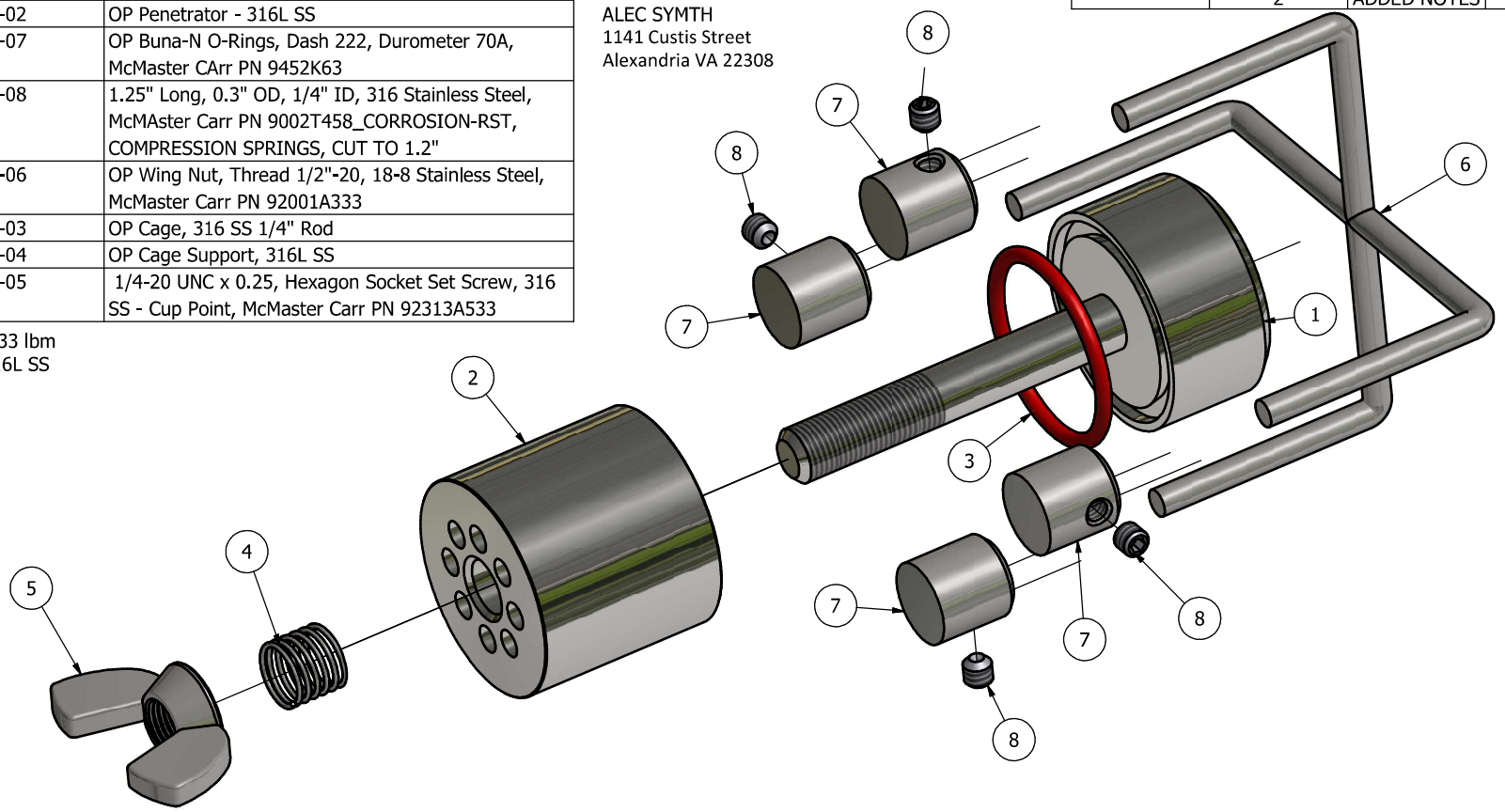
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	OP-01	Overpressure Cap - 316 SS
2	1	OP-02	OP Penetrator - 316L SS
3	1	OP-07	OP Buna-N O-Rings, Dash 222, Durometer 70A, McMaster CArr PN 9452K63
4	1	OP-08	1.25" Long, 0.3" OD, 1/4" ID, 316 Stainless Steel, McMAster Carr PN 9002T458_CORROSION-RST, COMPRESSION SPRINGS, CUT TO 1.2"
5	1	OP-06	OP Wing Nut, Thread 1/2"-20, 18-8 Stainless Steel, McMaster Carr PN 92001A333
6	1	OP-03	OP Cage, 316 SS 1/4" Rod
7	4	OP-04	OP Cage Support, 316L SS
8	4	OP-05	1/4-20 UNC x 0.25, Hexagon Socket Set Screw, 316 SS - Cup Point, McMaster Carr PN 92313A533

WEIGHT 1.333 lbm
MATERIAL 316L SS

OP VALVE WAS DESIGNED AND FABRICATED BY ALEC SYMTH

ALEC SYMTH
1141 Custis Street
Alexandria VA 22308

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	Initial	11/24/2020	CLR
	2	ADDED NOTES	11/28/2020	CLR



NOTES:
1) PURPOSE IS TO VENT CABIN PRESSURE WHEN PRESSURE EXCEEDS AMBIENT PRESSURE BY CRACKING PRESSURE
2) THE OP VALVE SHOULD BE ASSEMBLED AS HIGH AS POSSIBLE
3) THE HULL PENETRATOR IS MADE of 316L STAINLESS STEEL
4) THE CRACKING PRESSURE DEPENDS ON COMPRESSION OF SPRING OP-08 AND POSTION OF WINGNUT
5) VISUAL INSPECTION THAT THE O-RING IS LANDED IN O-RING GROVE IS RECOMMENDED PRIOR TO SUBMERGING
6) O RING GLAND GROVE HAS AN INNER DOVEFACE TO KEEP THE GLAND FROM INADVERNTETLY BECOMMING DISLODGED
7) GLAND SEAT IS DEEPER THAN NORMAL BECASUSE THE VALVE IS DESIGNED TO SEAT WITH MINIMAL DIFFERENTIAL PRESSURE
8) GAGE SUPPORTS, 7 SHOULD BE GROUNDED AND WELDED TO HATCH. MATCH CURVATURE OF HATCH
9) MAXIMUM OPERATING PRESSURE TBT, CRACKING PRESSURE TBT
10) DO NOT INSTALL THE OP VALVE IN AN INVERTED POSITION

DRAWN ALEC SYMTH	11/24/2020	ALEC SYMTH
CHECKED CLR	11/24/2020	
QA		TITLE: OP Valve
MFG AS	11/24/2020	
APPROVED AS	11/24/2020	
SIZE B	DWG NO OP Valve Assembly	REV 1
SCALE	SHEET 1 OF 1	