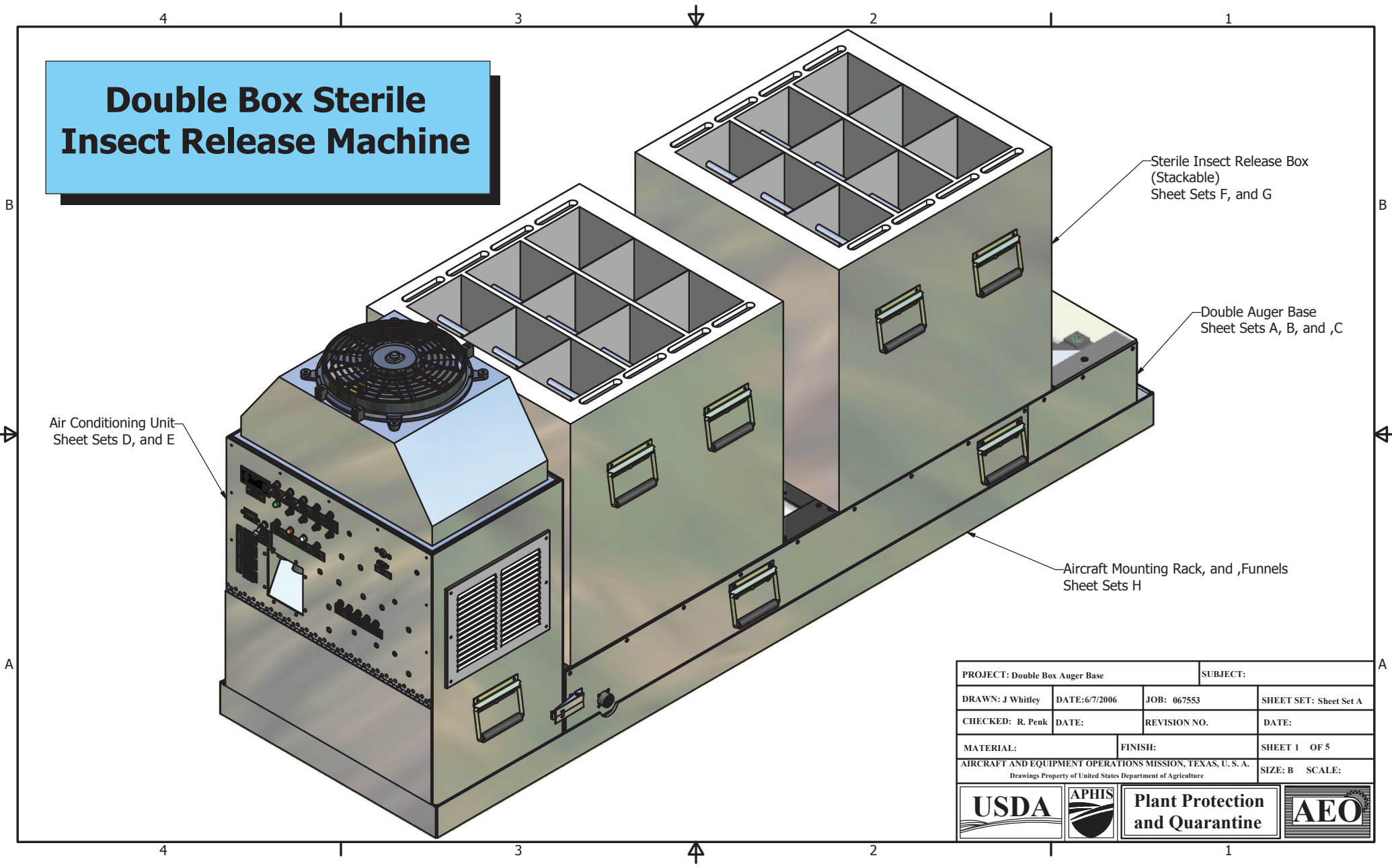
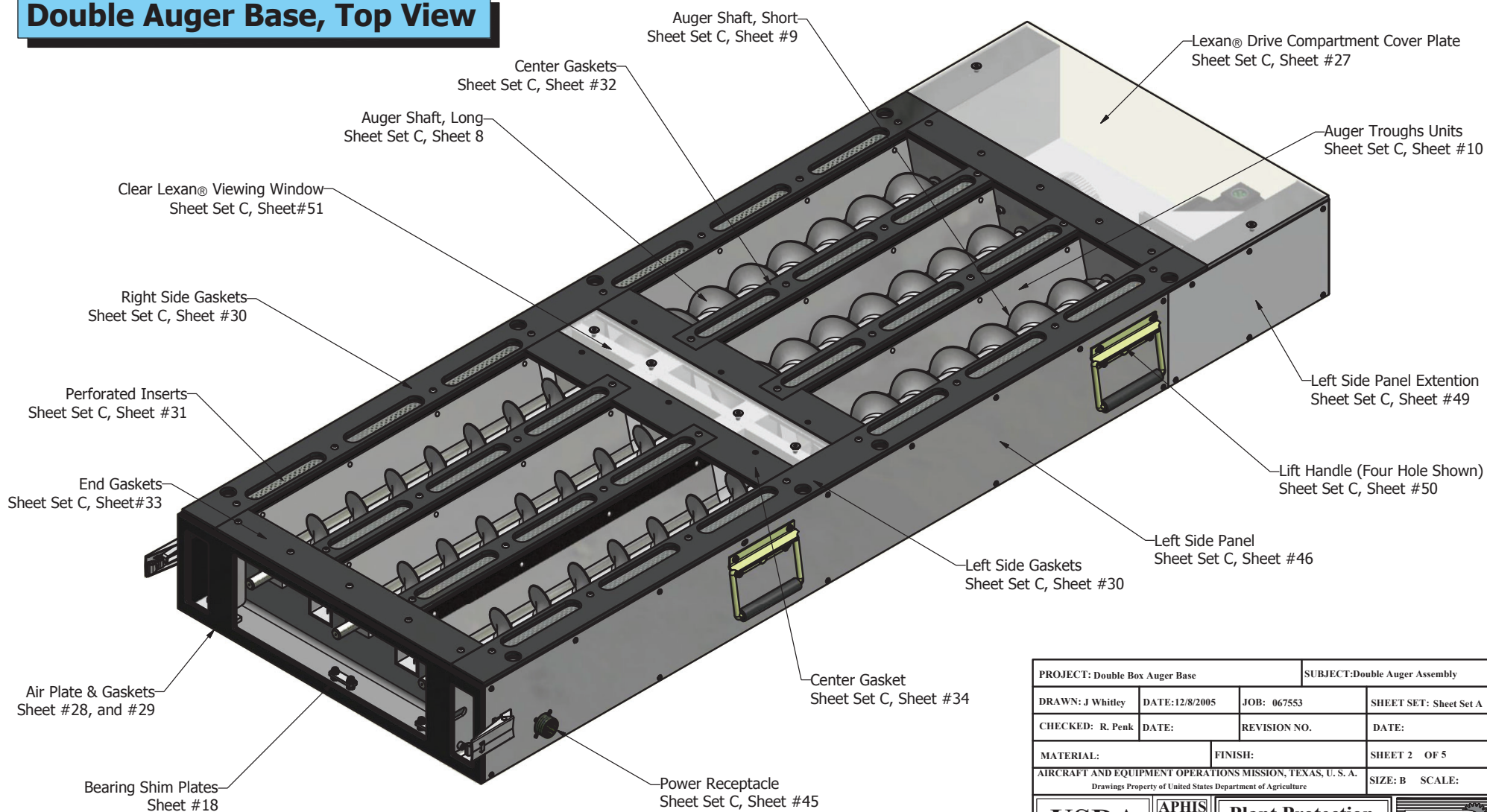


Appendix 1 - Insect Release Machine Drawings



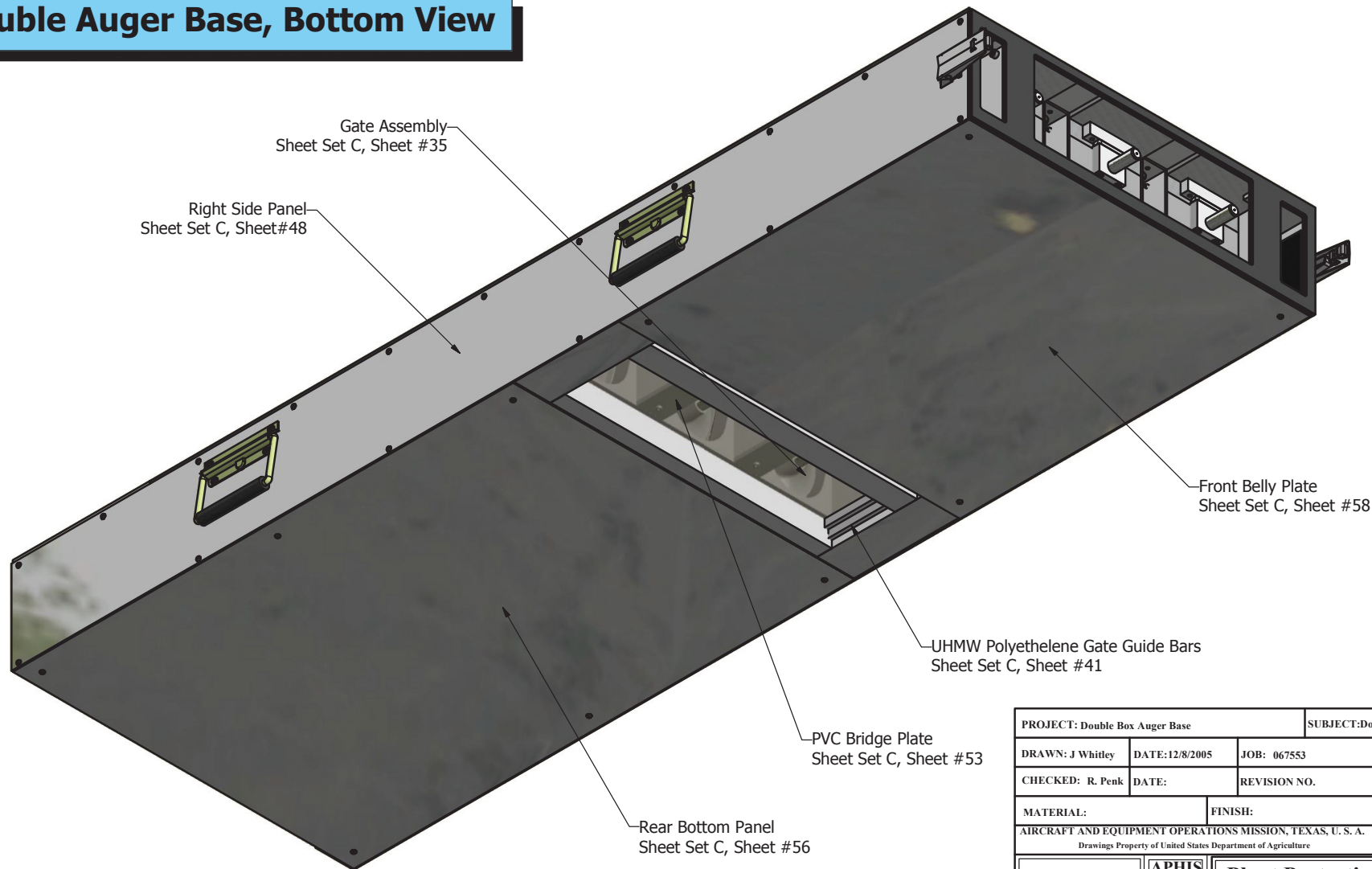
PROJECT: Double Box Auger Base			SUBJECT:
DRAWN: J Whitley	DATE: 6/7/2006	JOB: 067553	SHEET SET: Sheet Set A
CHECKED: R. Penk	DATE:	REVISION NO.	DATE:
MATERIAL:		FINISH:	SHEET 1 OF 5
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.			SIZE: B SCALE:
Drawings Property of United States Department of Agriculture			
USDA	APHIS	Plant Protection and Quarantine	AEO

Double Auger Base, Top View



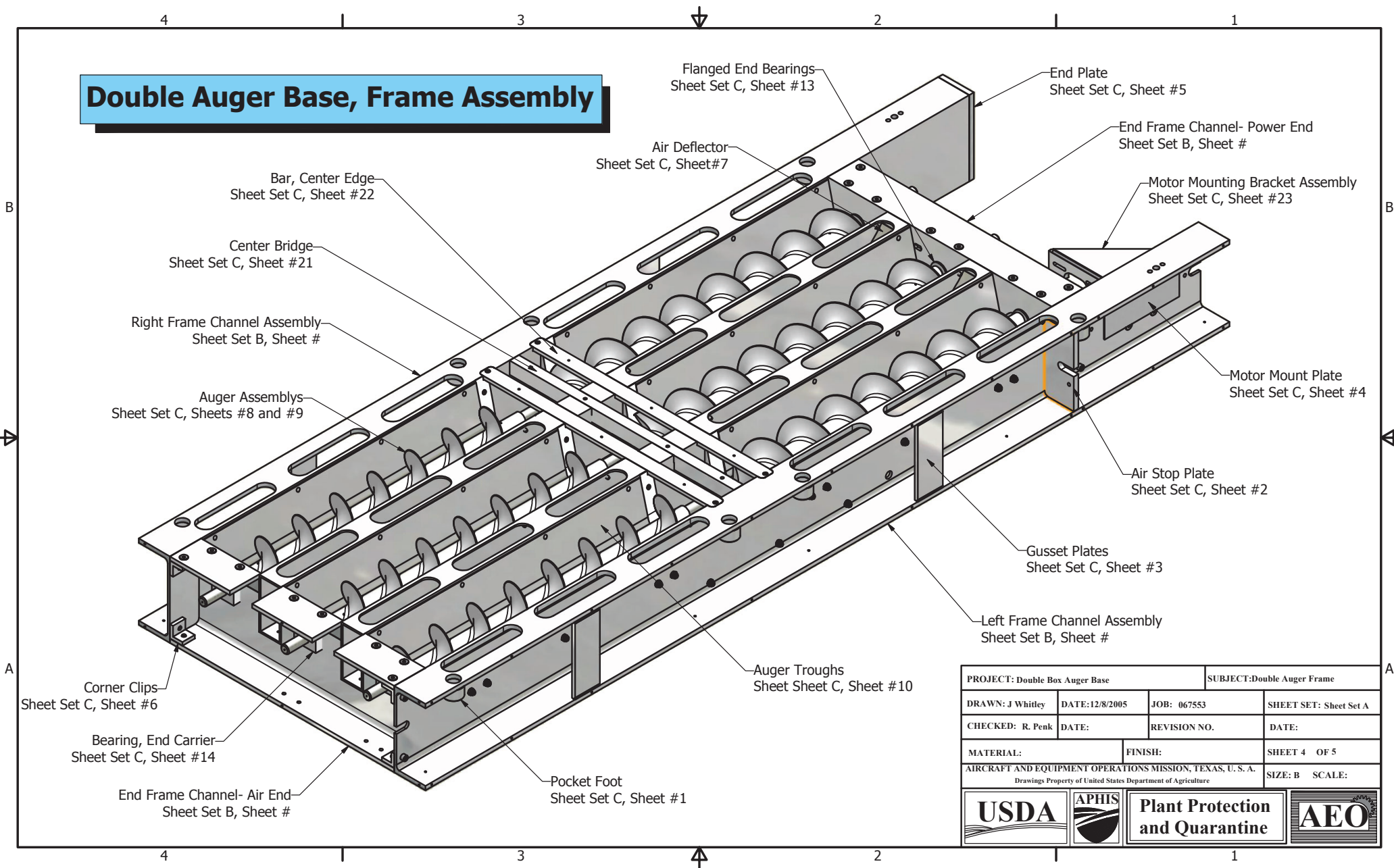
PROJECT: Double Box Auger Base			SUBJECT: Double Auger Assembly	
DRAWN: J Whitley	DATE: 12/8/2005	JOB: 067553	SHEET SET: Sheet Set A	
CHECKED: R. Penk	DATE:	REVISION NO.	DATE:	
MATERIAL:		FINISH:	SHEET 2 OF 5	
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.			SIZE: B SCALE:	
Drawings Property of United States Department of Agriculture				

Double Auger Base, Bottom View



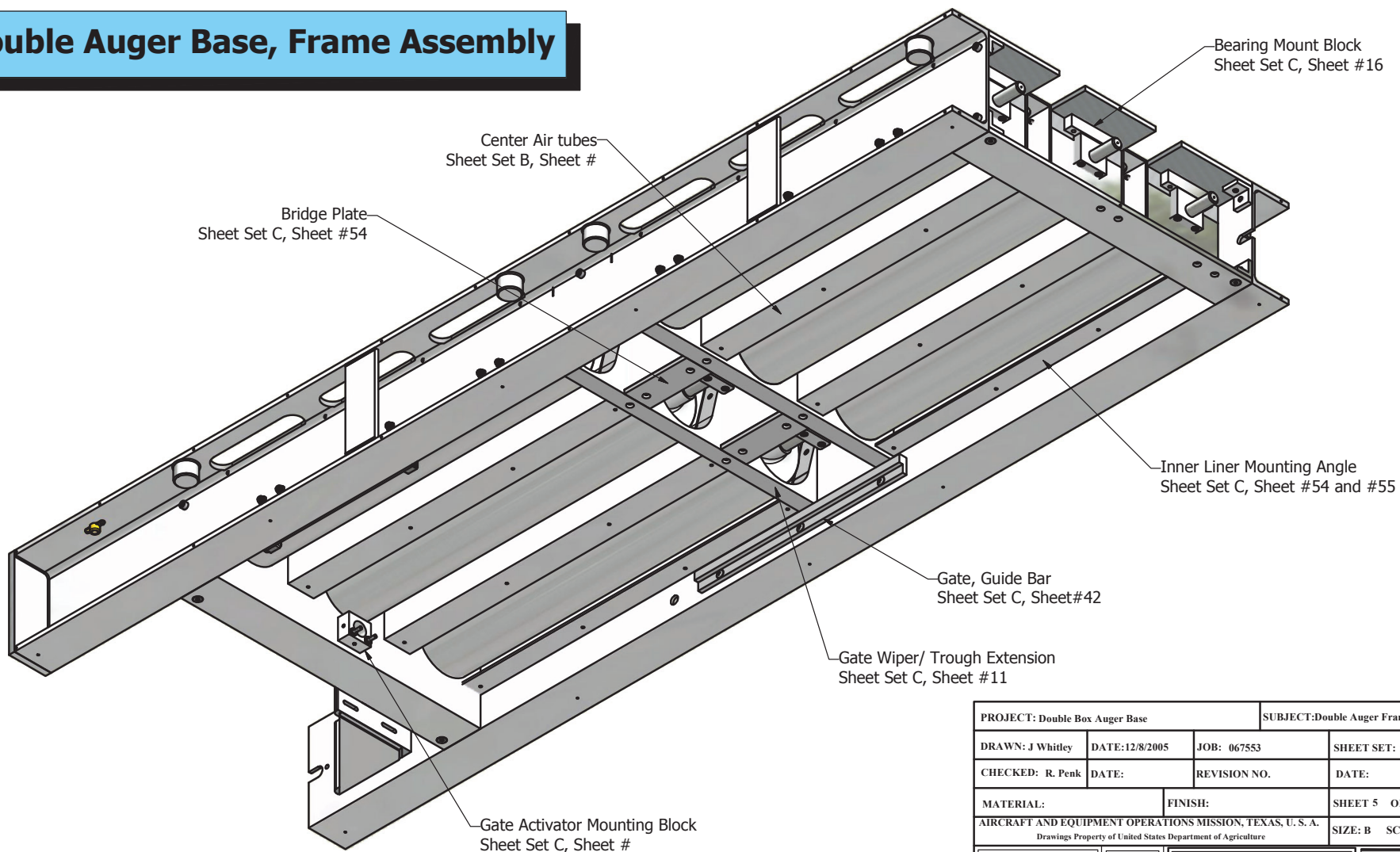
PROJECT: Double Box Auger Base			SUBJECT: Double Auger Assembly	
DRAWN: J Whitley	DATE: 12/8/2005	JOB: 067553	SHEET SET: Sheet Set A	
CHECKED: R. Penk	DATE:	REVISION NO.	DATE:	
MATERIAL:		FINISH:	SHEET 3 OF 5	
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.			SIZE: B SCALE:	
Drawings Property of United States Department of Agriculture				
				

Double Auger Base, Frame Assembly



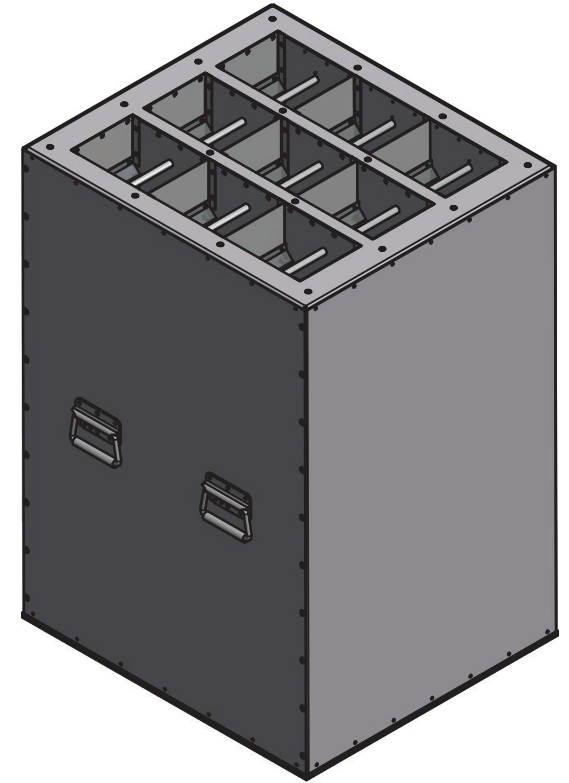
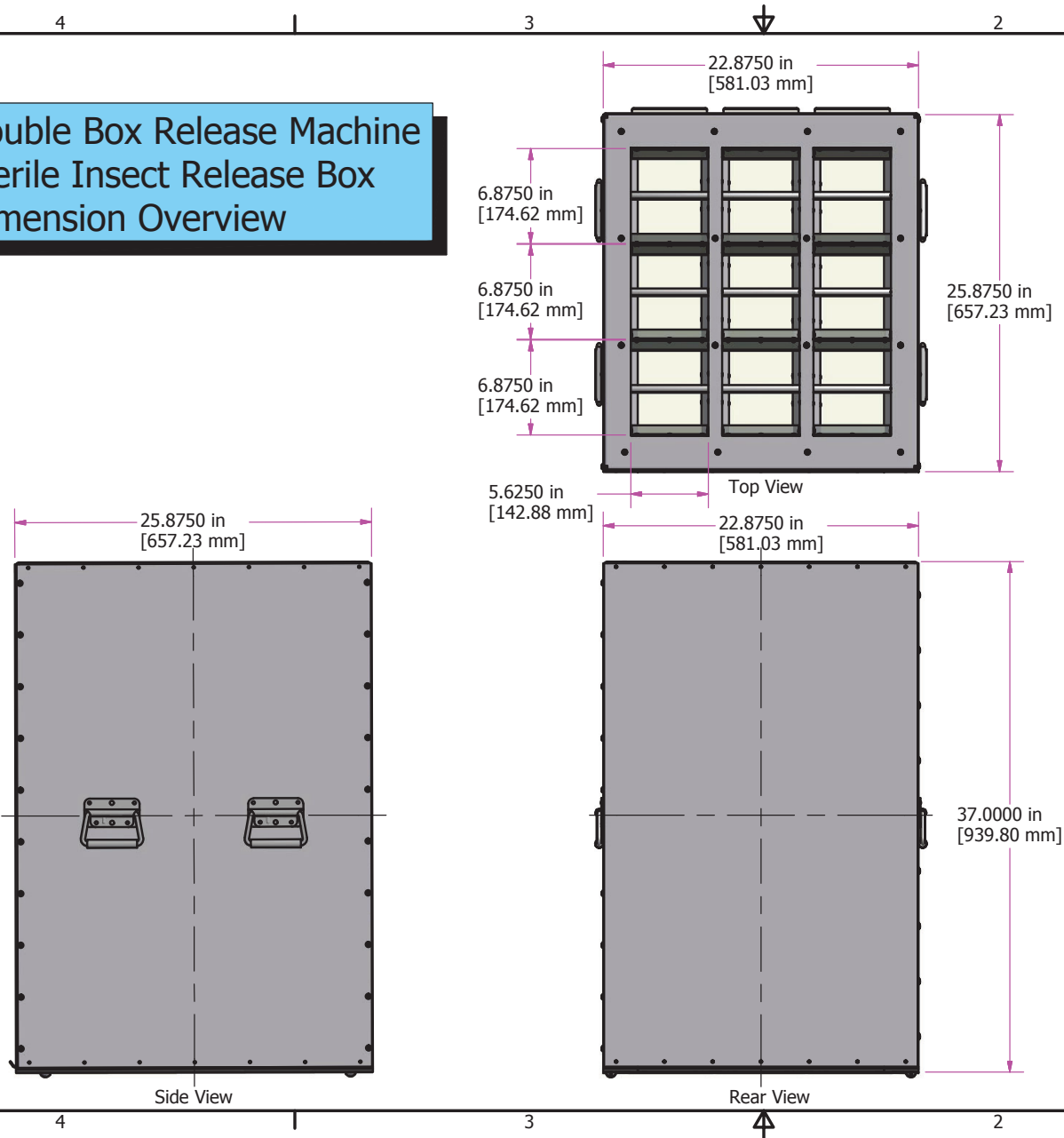
PROJECT: Double Box Auger Base			SUBJECT: Double Auger Frame	
DRAWN: J Whitley	DATE: 12/8/2005	JOB: 067553	SHEET SET: Sheet Set A	
CHECKED: R. Penk	DATE:	REVISION NO.	DATE:	
MATERIAL:		FINISH:	SHEET 4 OF 5	
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.			SIZE: B SCALE:	
Drawings Property of United States Department of Agriculture				
				
				

Double Auger Base, Frame Assembly



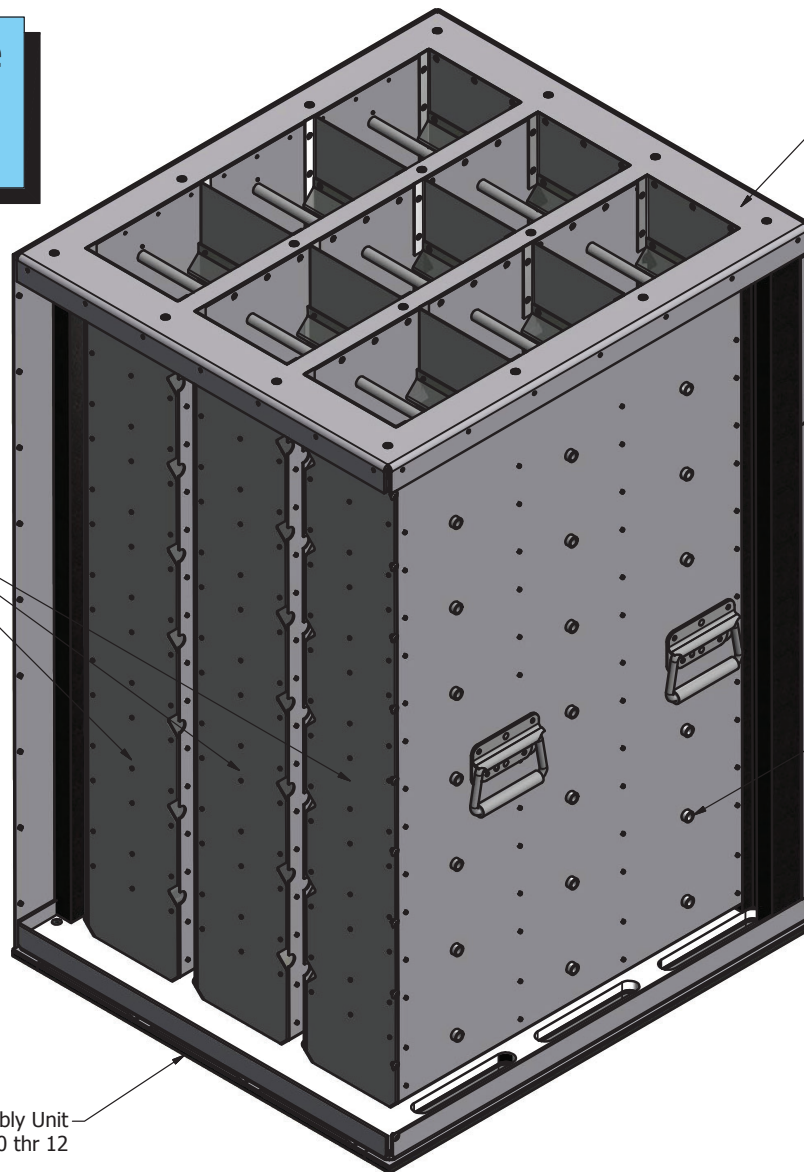
PROJECT: Double Box Auger Base			SUBJECT: Double Auger Frame	
DRAWN: J Whitley	DATE: 12/8/2005	JOB: 067553	SHEET SET: Sheet Set A	
CHECKED: R. Penk	DATE:	REVISION NO.	DATE:	
MATERIAL:		FINISH:	SHEET 5 OF 5	
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.			SIZE: B SCALE:	
Drawings Property of United States Department of Agriculture				
				

Double Box Release Machine Sterile Insect Release Box Dimension Overview



PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 7/26/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 1 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		

Double Box Release Machine Sterile Insect Release Box Parts & Sub-Assembly Index



Top Sub-Assembly Unit
Sheets #3 Thru 9

Foam Insulation Panels
Sheet #34 Thru 35

Exterior Aluminum Panels
Sheet #29 Thru 32

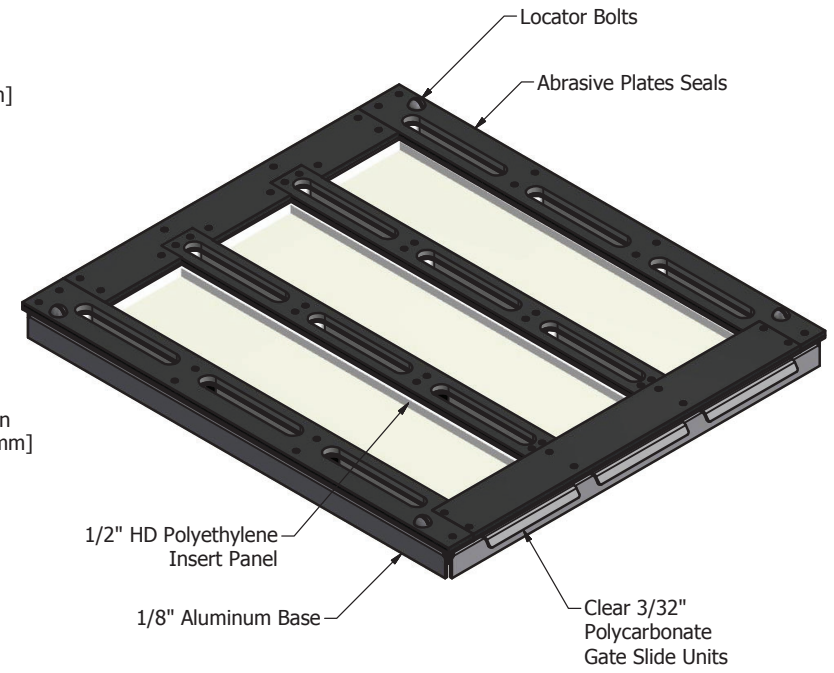
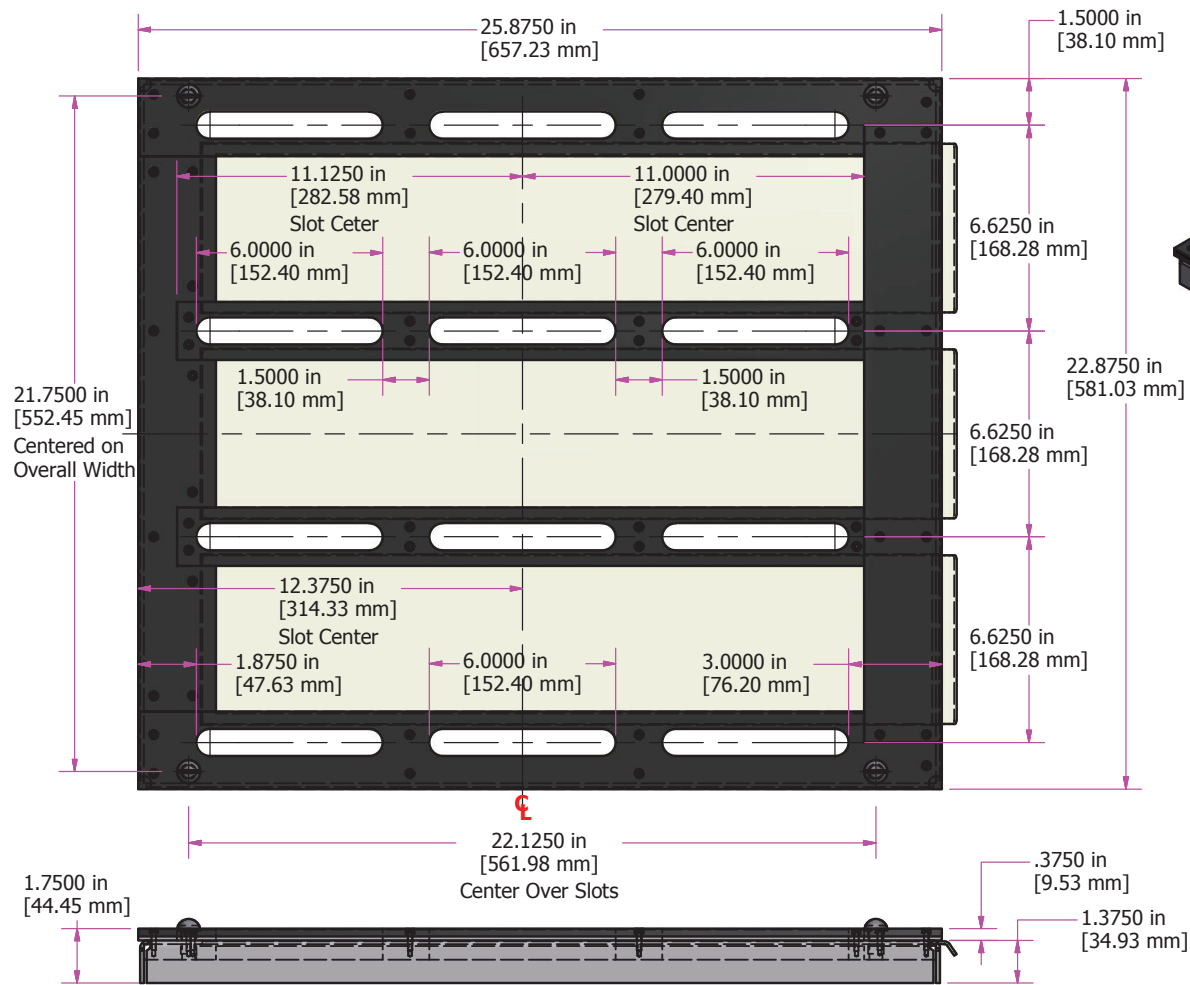
Air Tubes
Sheet #28

Interior Sub-Assembly Chambers
Sheet #14 Thru 27

Bottom Gate Sub-Assembly Unit
Sheets #10 thr 12

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 7/26/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 2 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
		
		

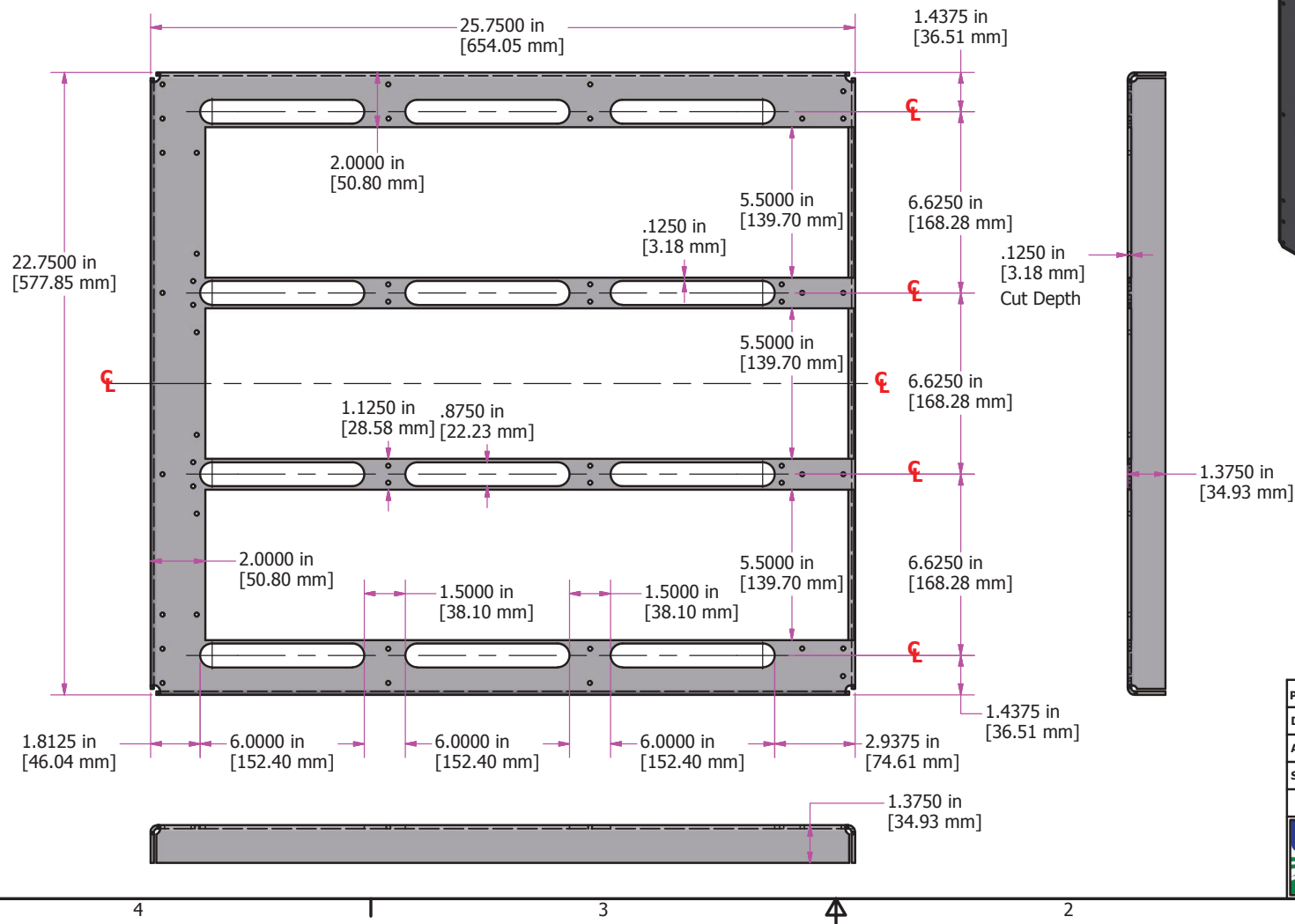
Double Box Release Machine Sterile Insect Release Box Gate Sub-Assembly Unit



Part Names & Sheet Numbers
(1) Sub-Assemblies Required Per Unit

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/15/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B		SHEET 3 OF 35 DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		

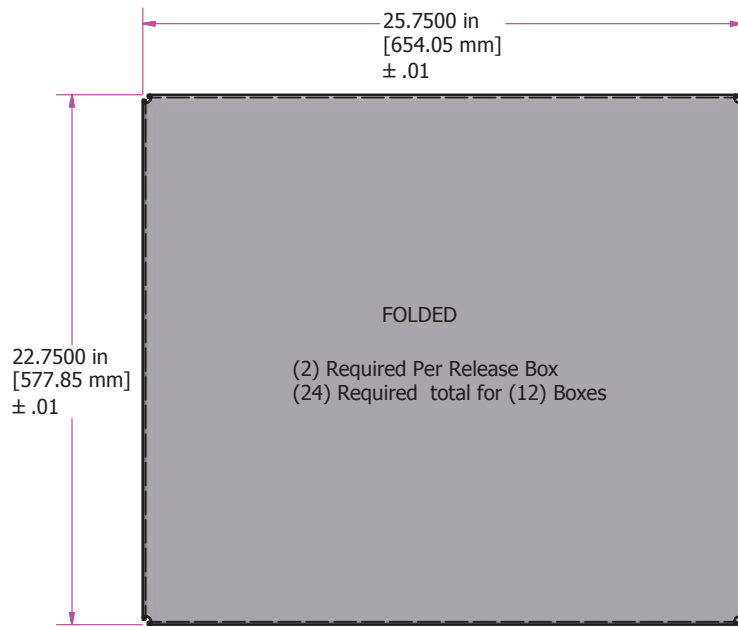
Double Box Release Machine Sterile Insect Release Box Aluminum Gate Base



Cut out Sections to be done on
the CNC Router Table.

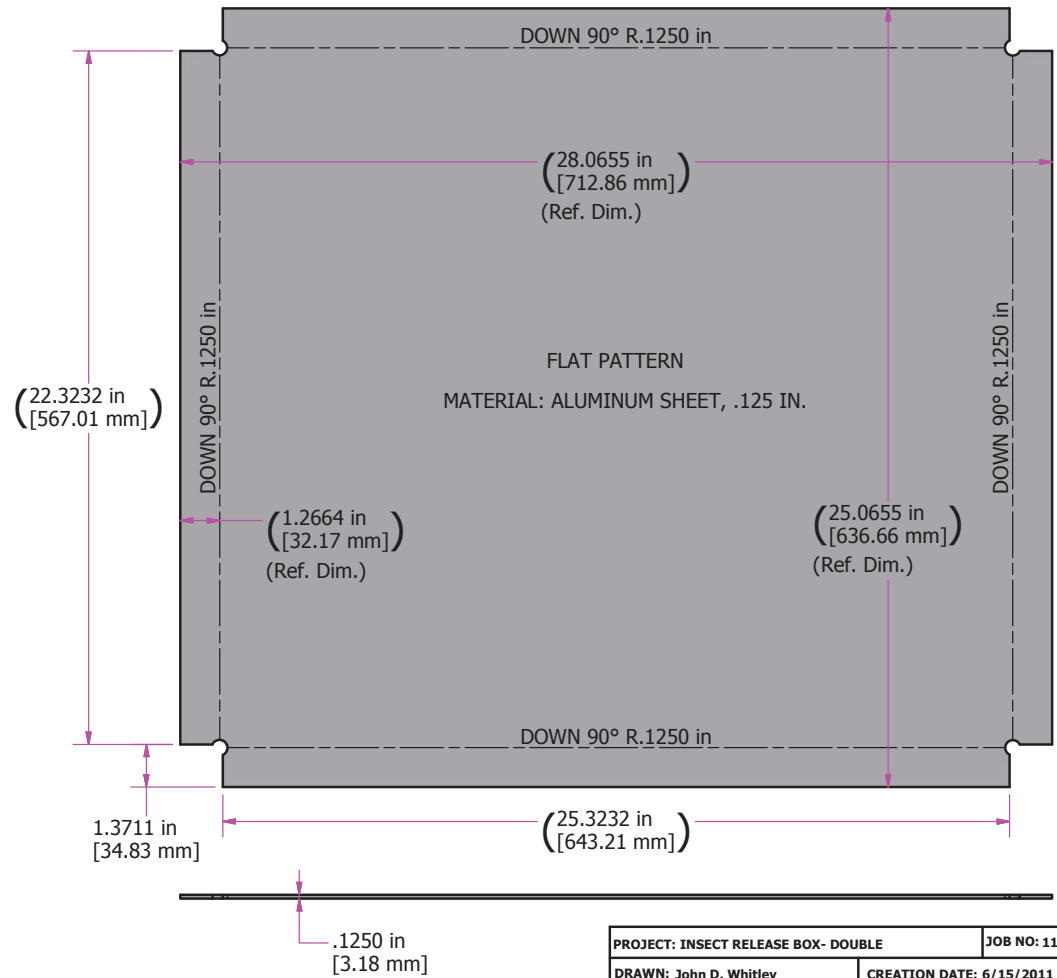
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/15/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B SHEET 4 OF 35 DO NOT SCALE DRAWING		
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		

Double Box Release Machine Sterile Insect Release Box Blank Base for Tops & Bottoms

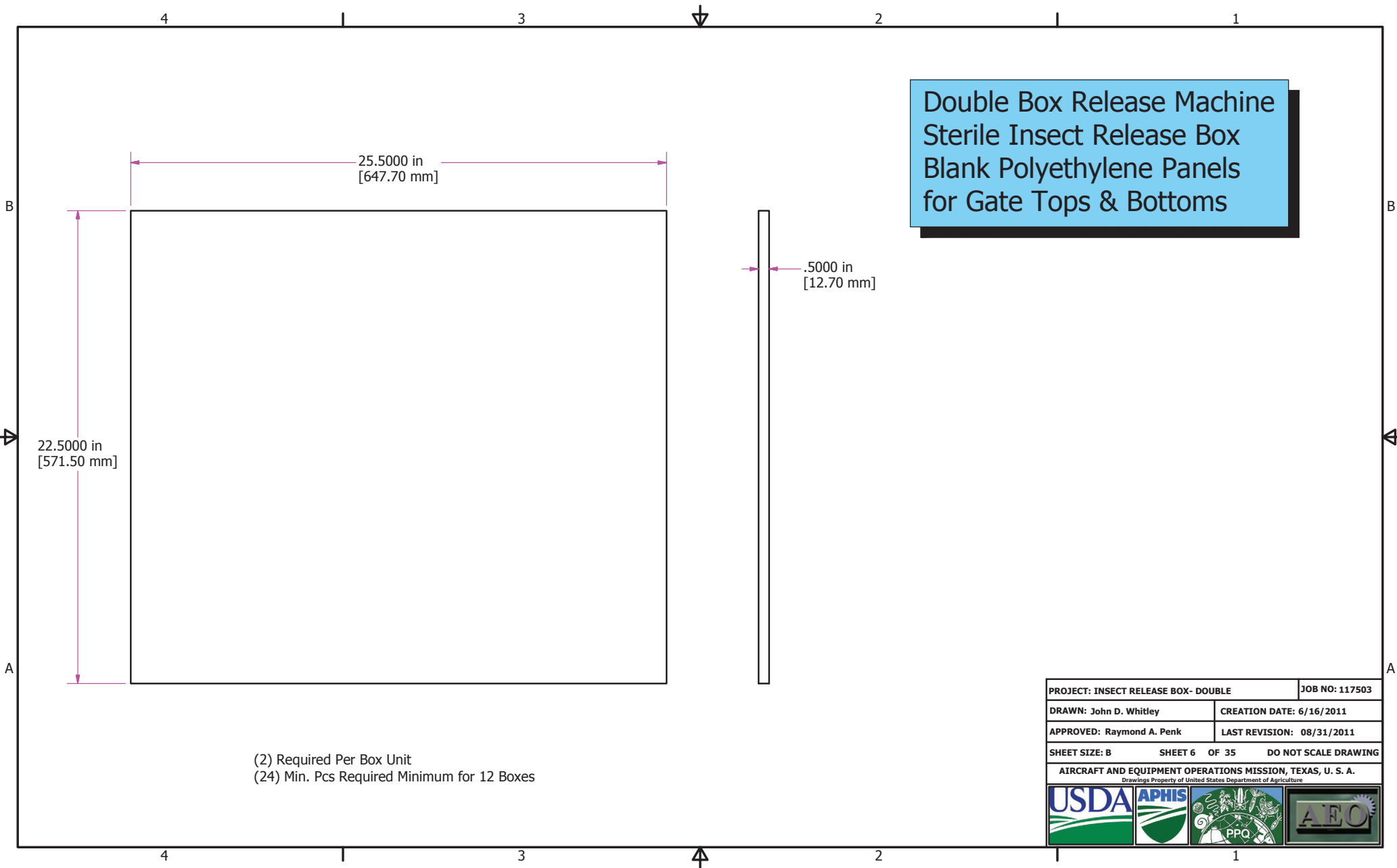


(2) Required Per Release Box
(24) Required total for (12) Boxes

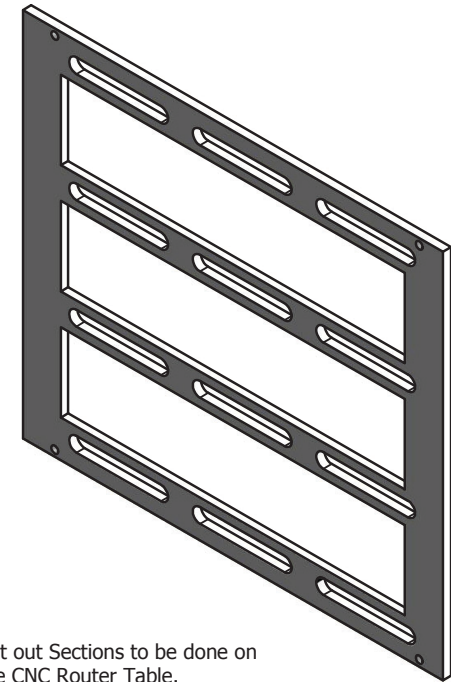
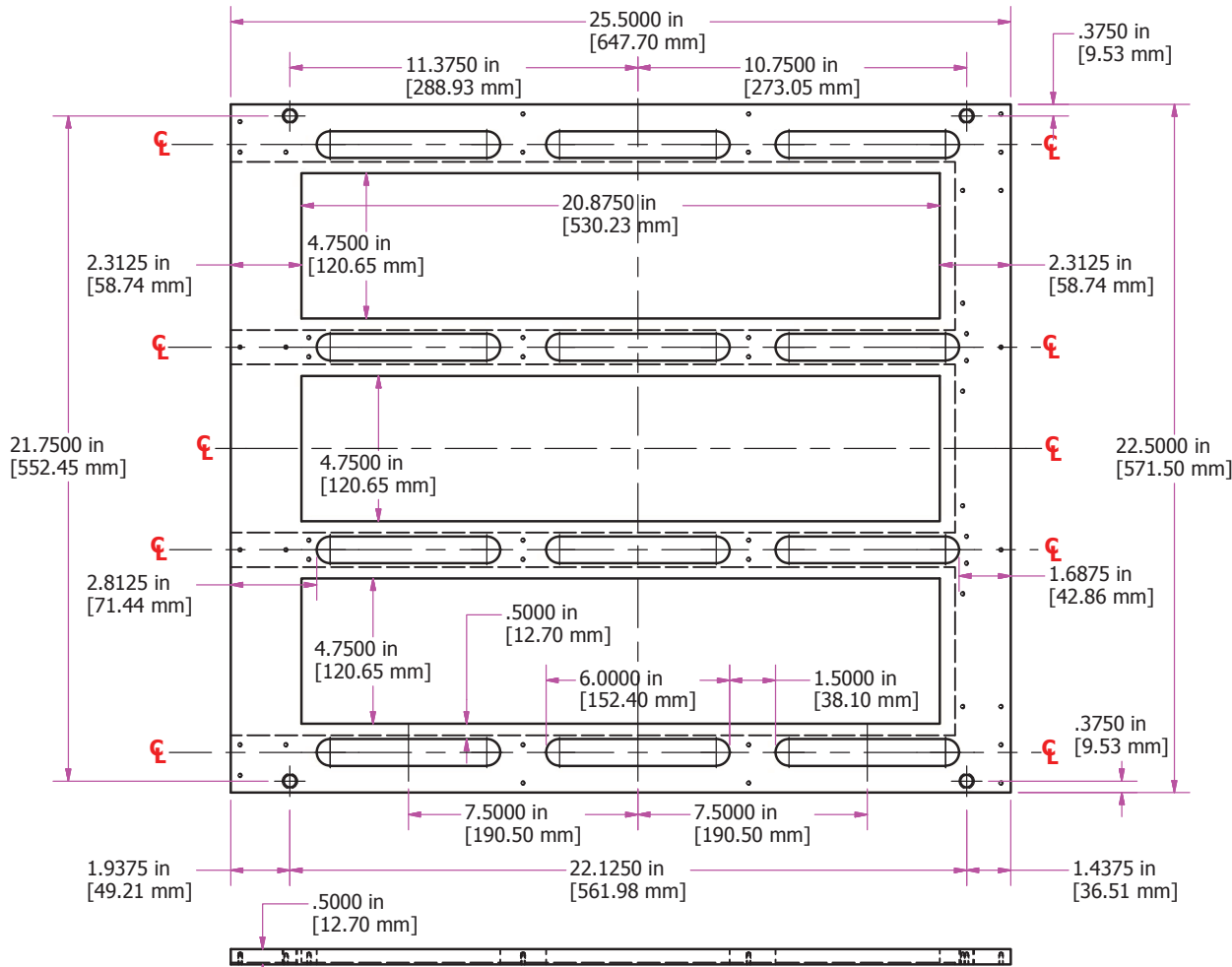
(2) Required Per Box Unit
(24) Min. Pcs Required Minimum for 12 Boxes



PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/15/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 5 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		



Double Box Release Machine Sterile Insect Release Box HD Polyethylene Insert Panel



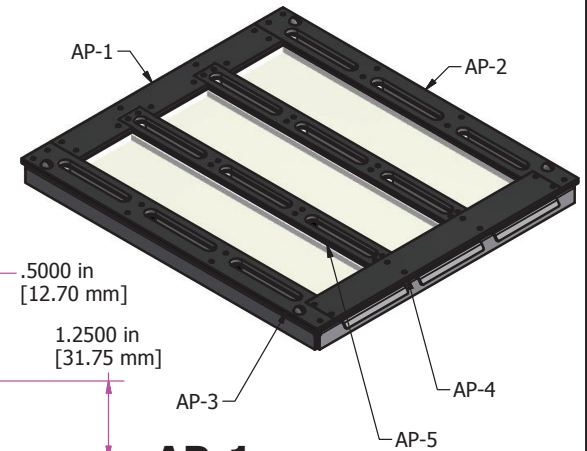
Cut out Sections to be done on the CNC Router Table.

MATERIAL: 1/2" HD Polyethylene Sheet
(1) Required Per Sub-Assembly Unit

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/16/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B		SHEET 7 OF 35
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		DO NOT SCALE DRAWING
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

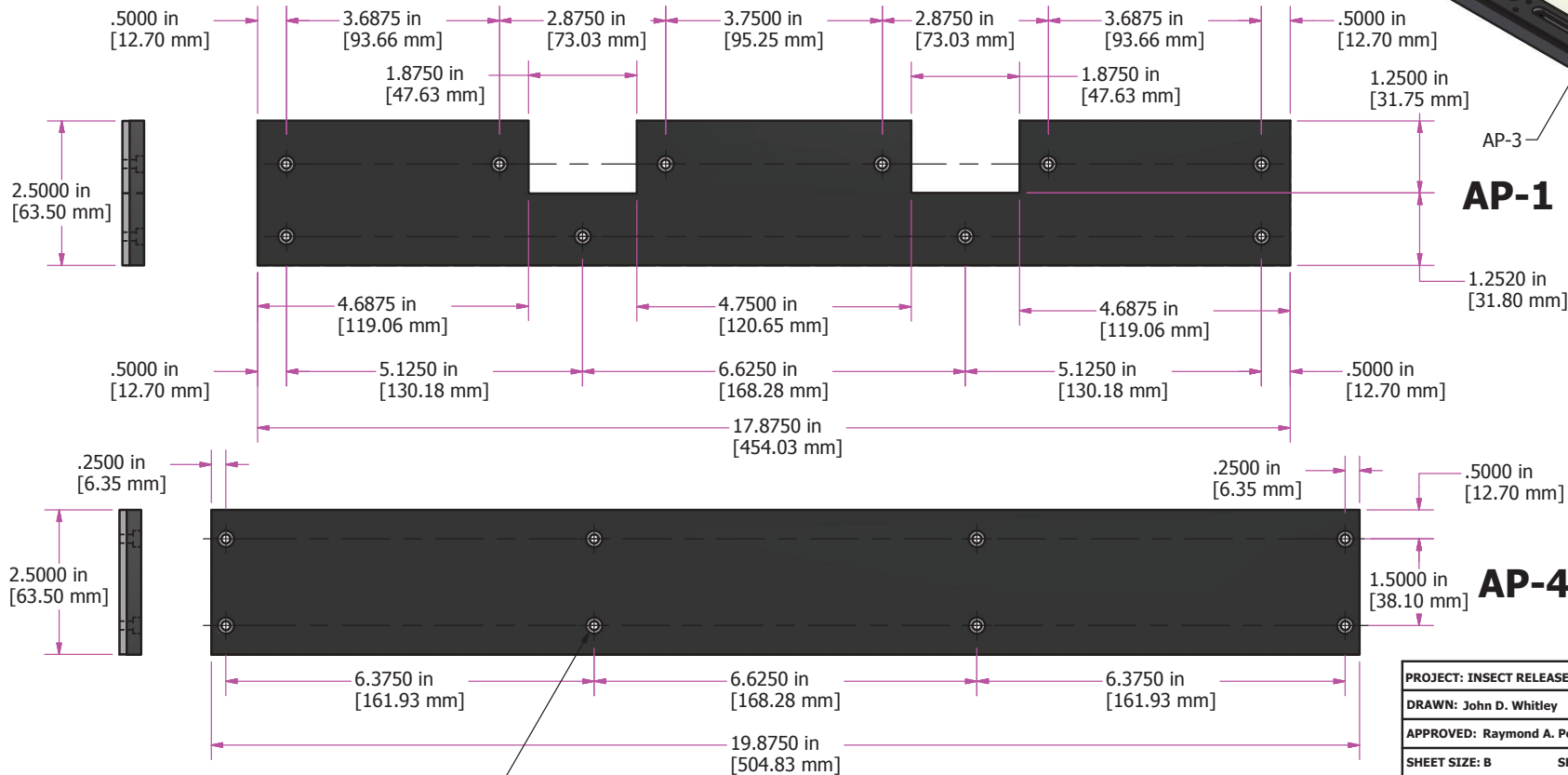
Double Box Release Machine Sterile Insect Release Box Abrasive Plate Details

Abrasive Plate		
Part Number	Req. Per Gate	Cut Size
AP-1	1	17-7/8" x 2-1/2"
AP-2	1	25-7/8" x 2-1/2"
AP-3	1	25-7/8" x 2-1/2"
AP-4	1	19-7/8" x 2-1/2"
AP-5	2	22-1/8" x 1-7/8"



AP-1

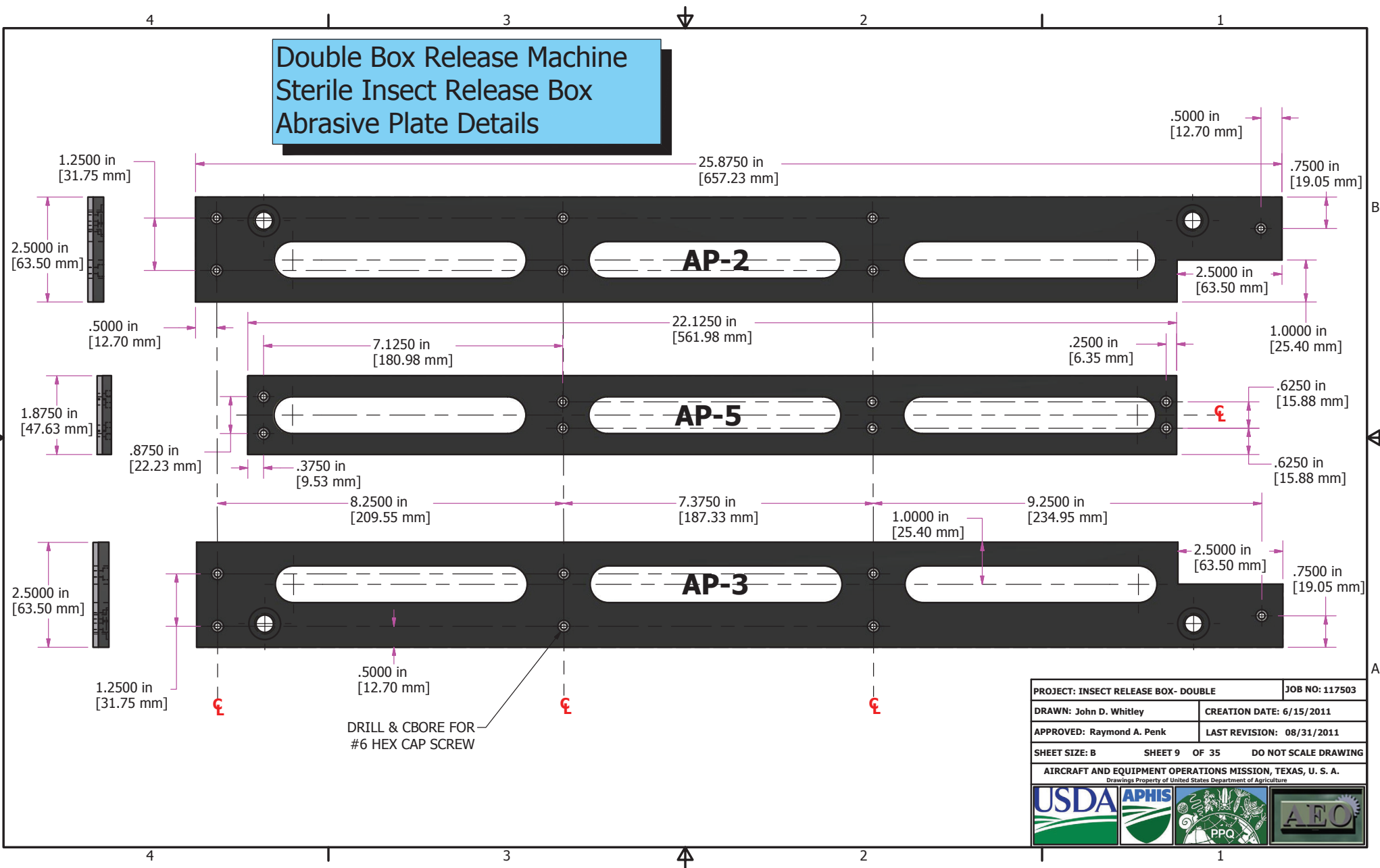
AP-4



DRILL & CBORE FOR
#6 HEX CAP SCREW

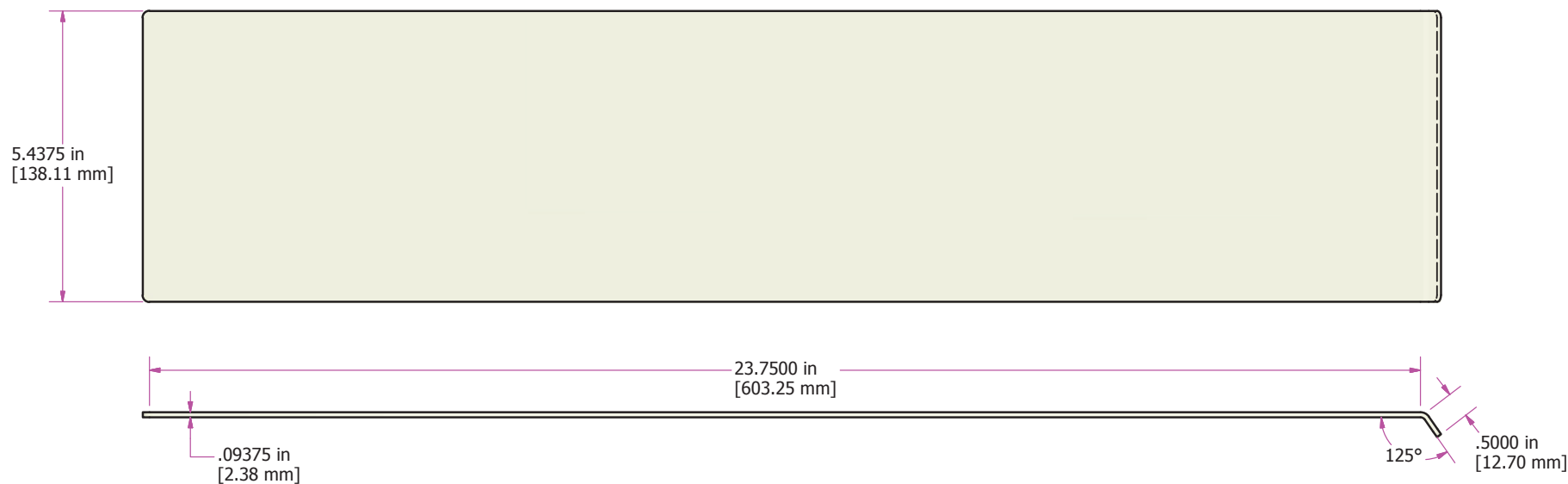
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/15/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B SHEET 8 OF 35 DO NOT SCALE DRAWING		
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		

Double Box Release Machine Sterile Insect Release Box Abrasive Plate Details



PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/15/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B SHEET 9 OF 35 DO NOT SCALE DRAWING		
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
		
		

Double Box Release Machine Sterile Insect Release Box Polycarbonate Gates

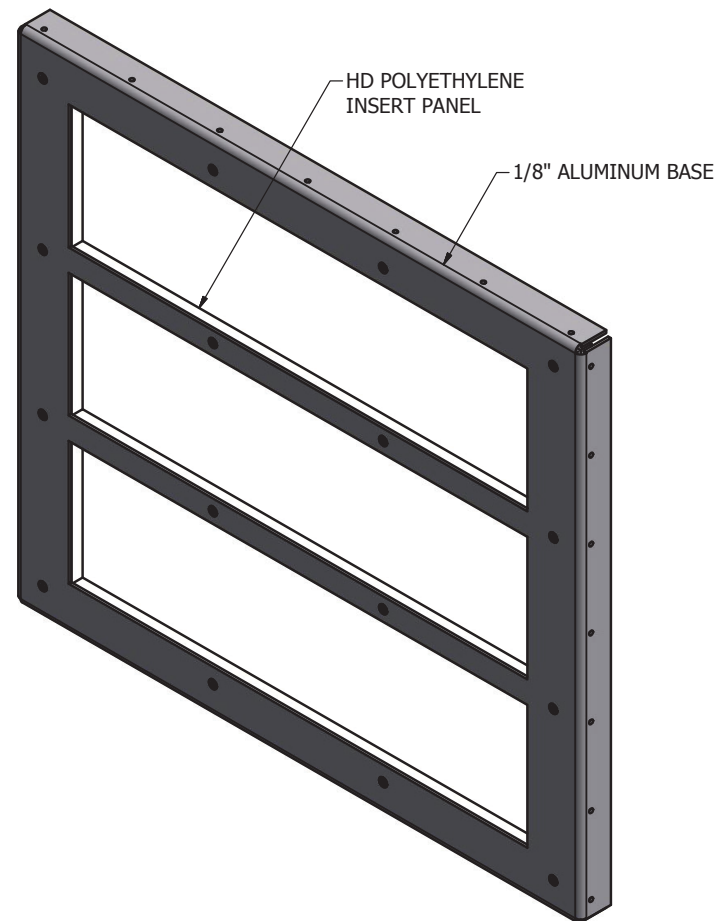
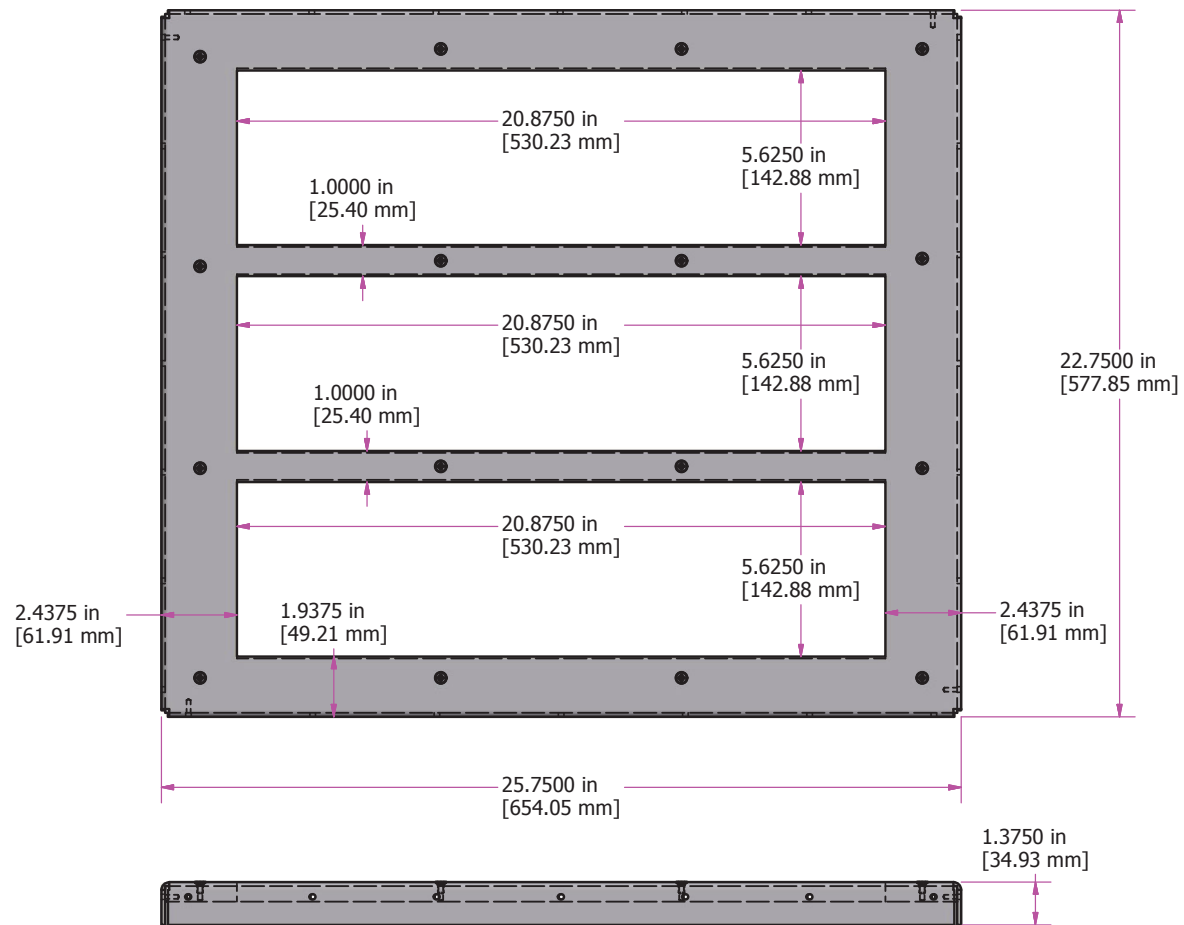


(3) Pcs Req. Per Unit

MATERIAL: 3/32" Polycarbonate Sheet,
2nd Option, Aluminum Sheet

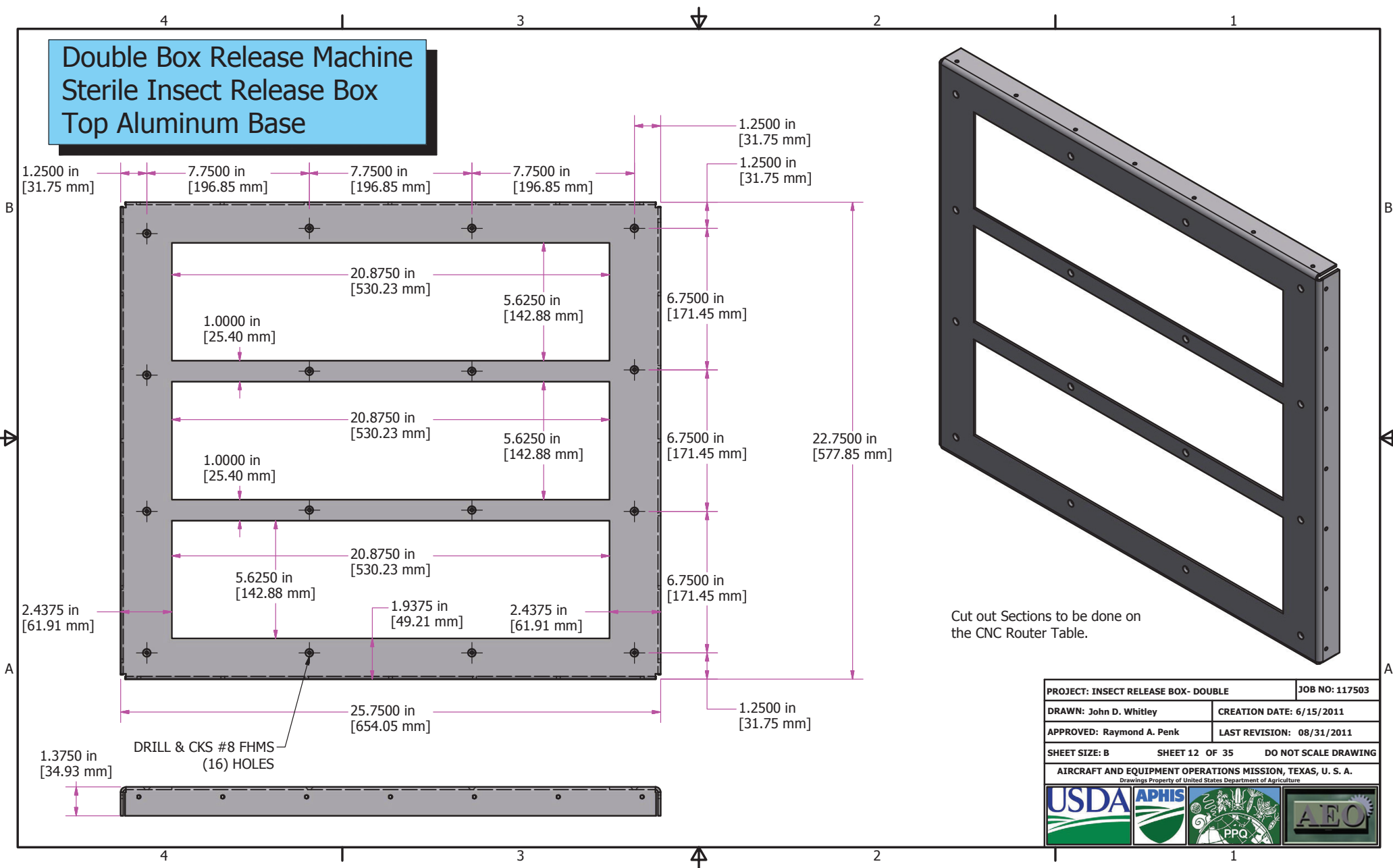
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/20/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 10 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
		
		

Double Box Release Machine Sterile Insect Release Box Top Seal Sub-Assembly

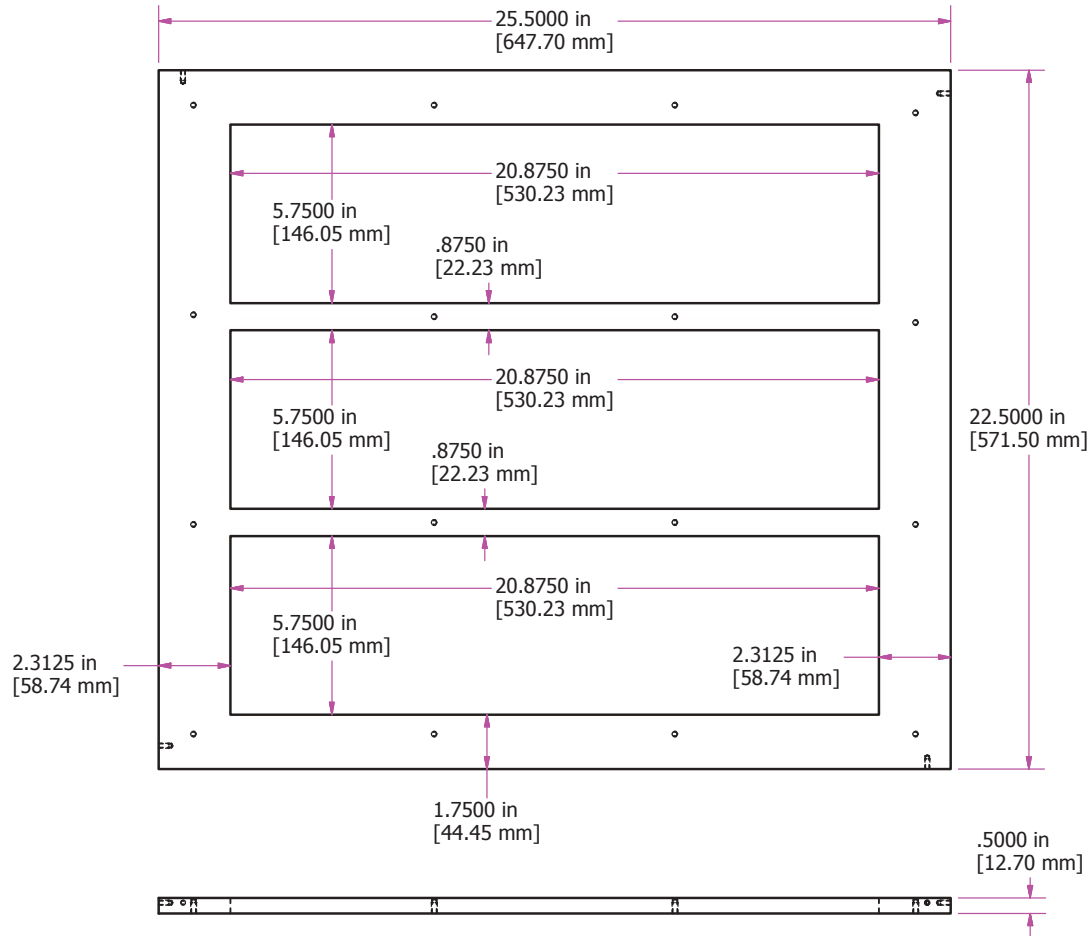


PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/1/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 11 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

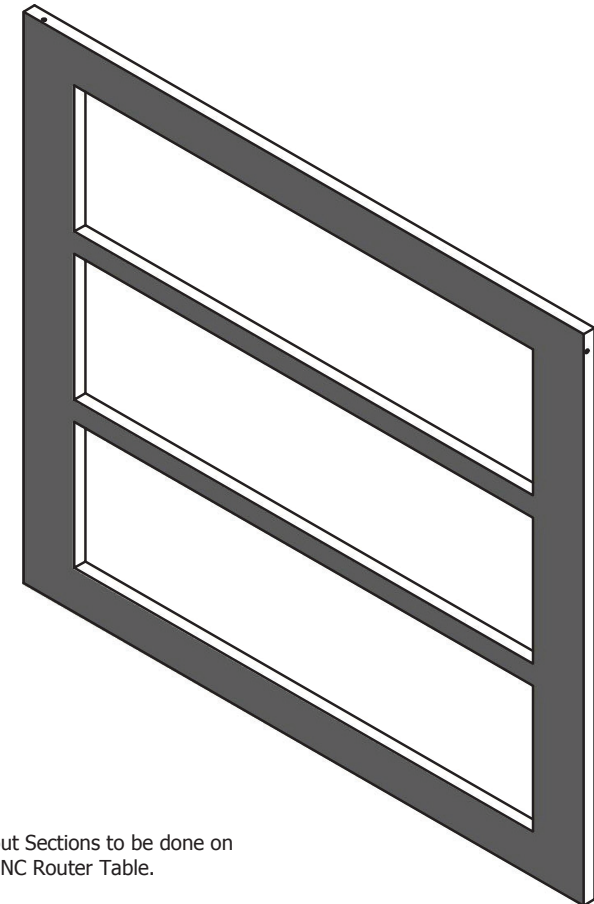
Double Box Release Machine Sterile Insect Release Box Top Aluminum Base



Double Box Release Machine Sterile Insect Release Box Top Assembly Polyethylene Insert



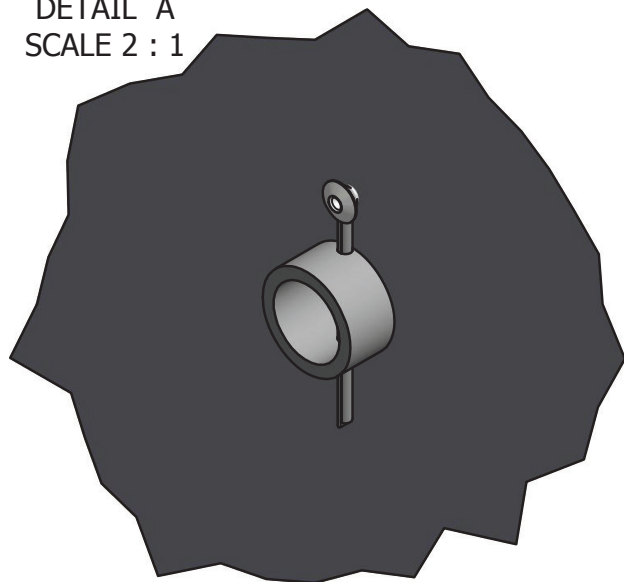
Cut out Sections to be done on the CNC Router Table.



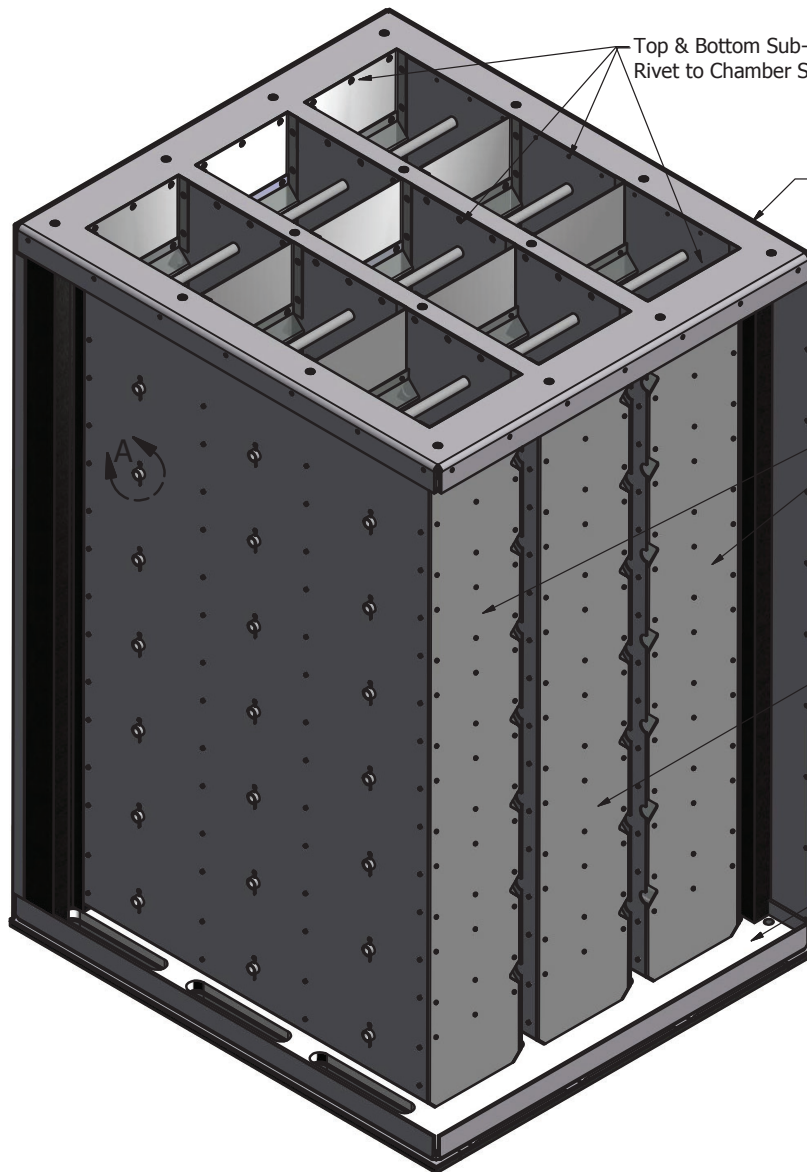
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 6/16/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 13 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

Double Box Release Machine Sterile Insect Release Box Sub-Assemblies Assembled

DETAIL A
SCALE 2 : 1



Air Tubes Pinned
In Place Slots Down
With Cotter Pin
At One End.



Top & Bottom Sub-Assemblies
Rivet to Chamber Sub-Assemblies

Top Sub-Assembly

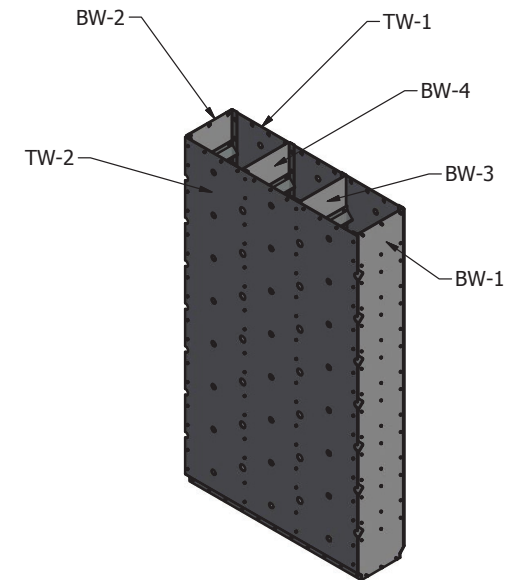
Outside Chamber Sub-Assembly

Center Chamber Sub-Assembly

Bottom Gate Sub-Assembly

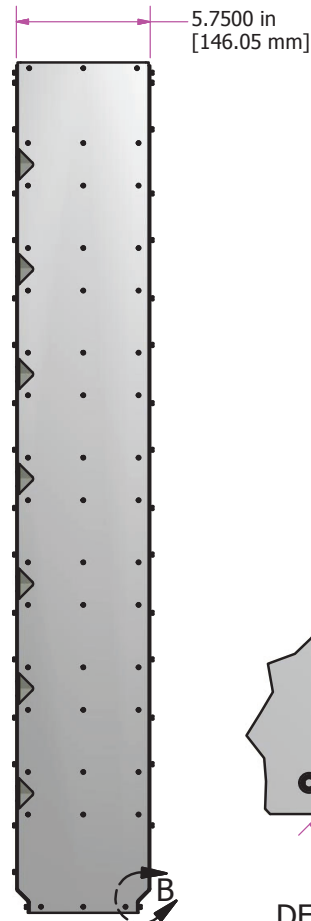
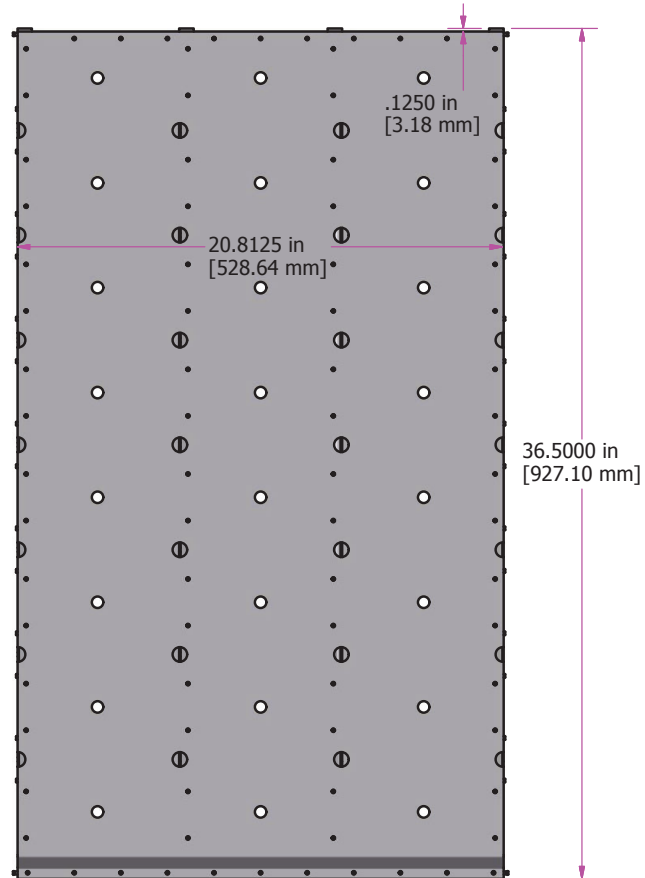
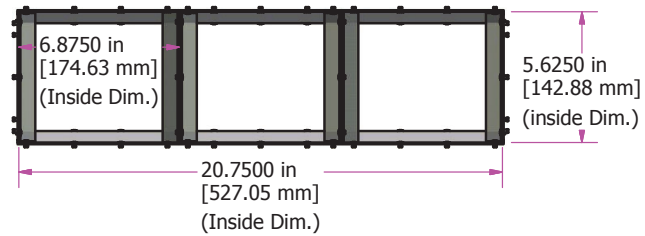
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 7/26/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 14 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

Double Box Release Machine Sterile Insect Release Box Outside Chamber Sub-Assembly



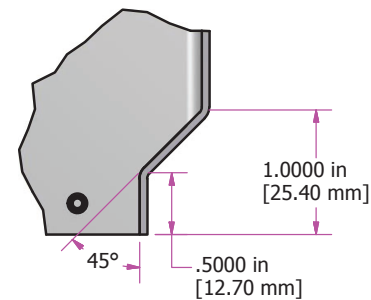
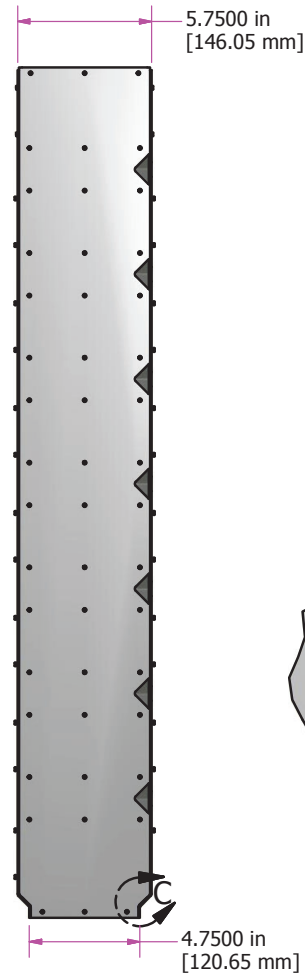
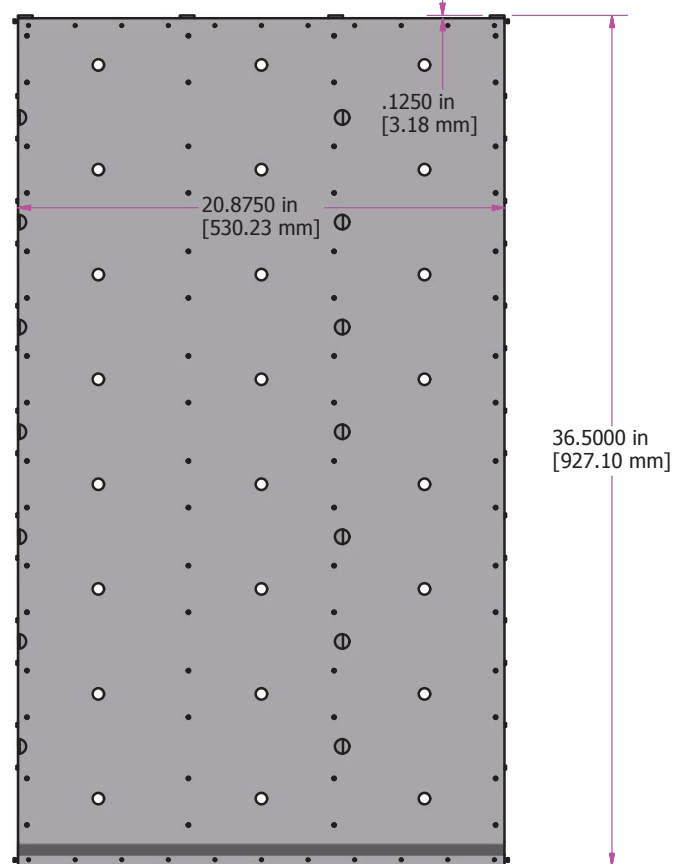
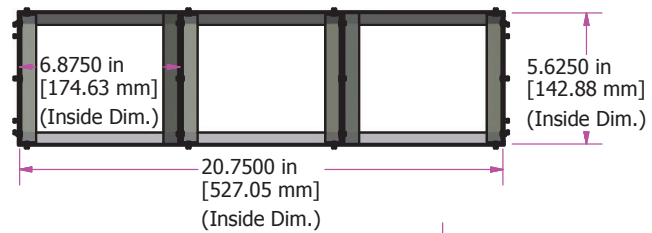
Part Numbers & Sheet Numbers
(2) Sub-Assemblies Required Per Unit

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 9/1/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 15 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		

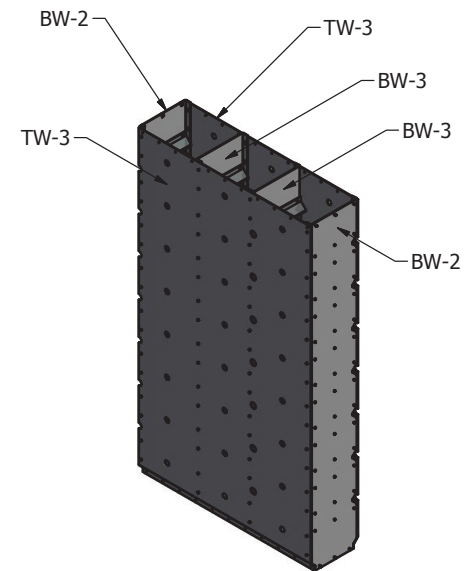


DETAIL B
SCALE 1 : 1

Double Box Release Machine Sterile Insect Release Box Center Chamber Sub-Assembly



DETAIL C
SCALE 1 : 1

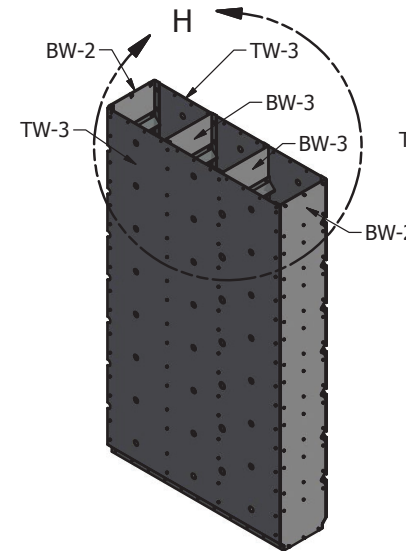
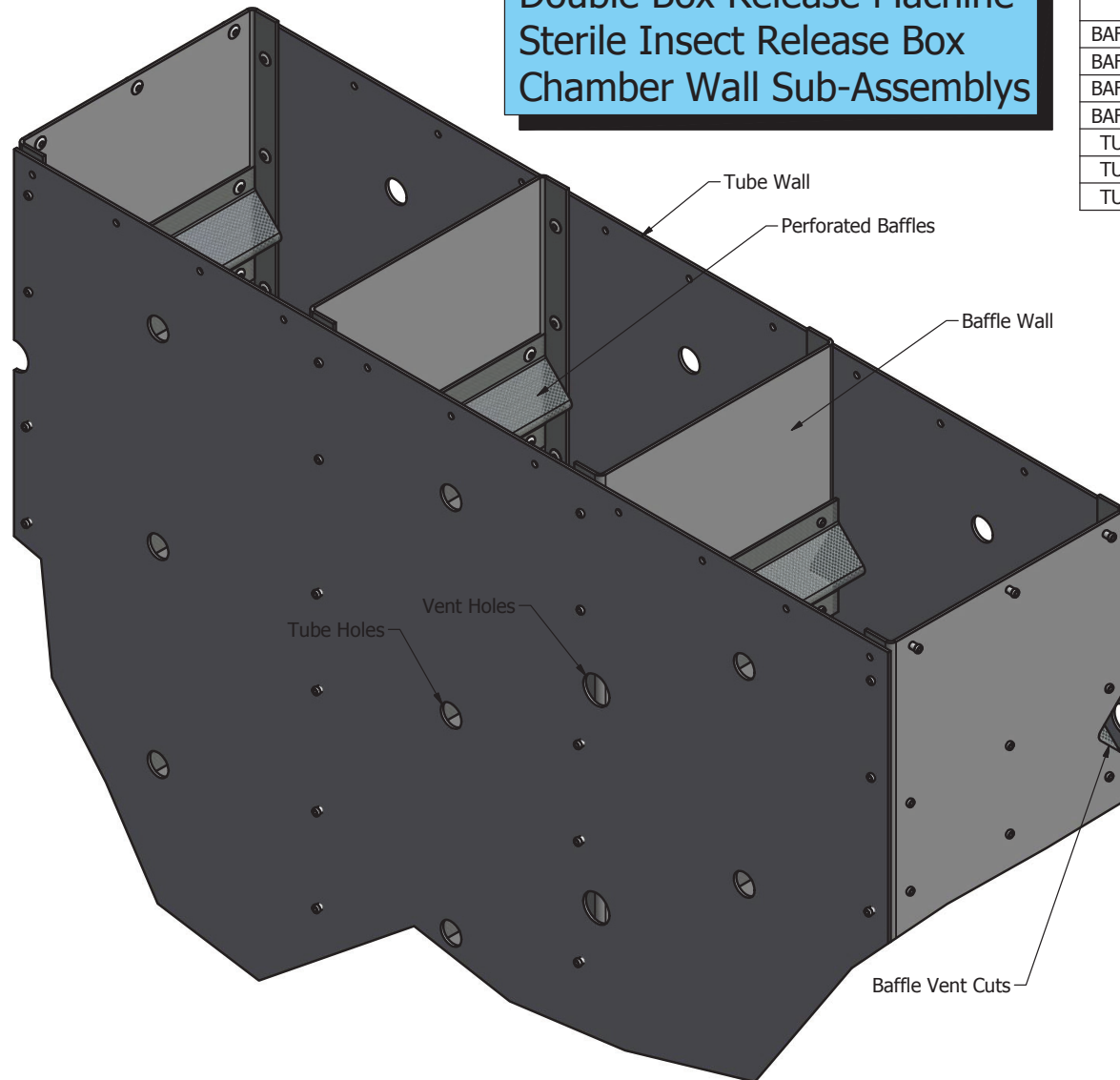


Part Numbers & Sheet Numbers
(1) Sub-Assemblies Required Per Unit

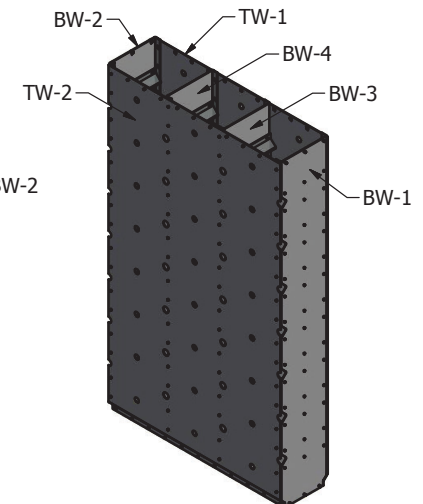
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 9/6/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 16 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

Double Box Release Machine Sterile Insect Release Box Chamber Wall Sub-Assemblies

CHAMBER ASSEMBLY PARTS LIST			
ITEM	QTY PER BOX	PART NUMBER	DESCRIPTION
BAFFLE WALL	2	BW-1	VENT CUT- LEFT / BAFFLE- INSIDE ONLY
BAFFLE WALL	3	BW-2	VENT CUT- RIGHT / BAFFLE- INSIDE ONLY
BAFFLE WALL	3	BW-3	VENT CUT- LEFT / BAFFLE- BOTH SIDES
BAFFLE WALL	2	BW-4	VENT CUT- RIGHT / BAFFLE- BOTH SIDES
TUBE WALL	2	TW-1	TUBE HOLES / NO VENT HOLES
TUBE WALL	2	TW-2	TUBE HOLES / ALL VENT HOLES
TUBE WALL	2	TW-3	TUBE HOLES / HALF VENT HOLES



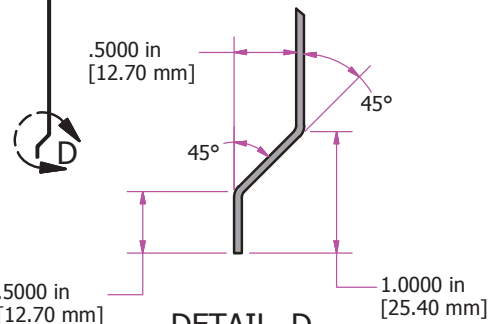
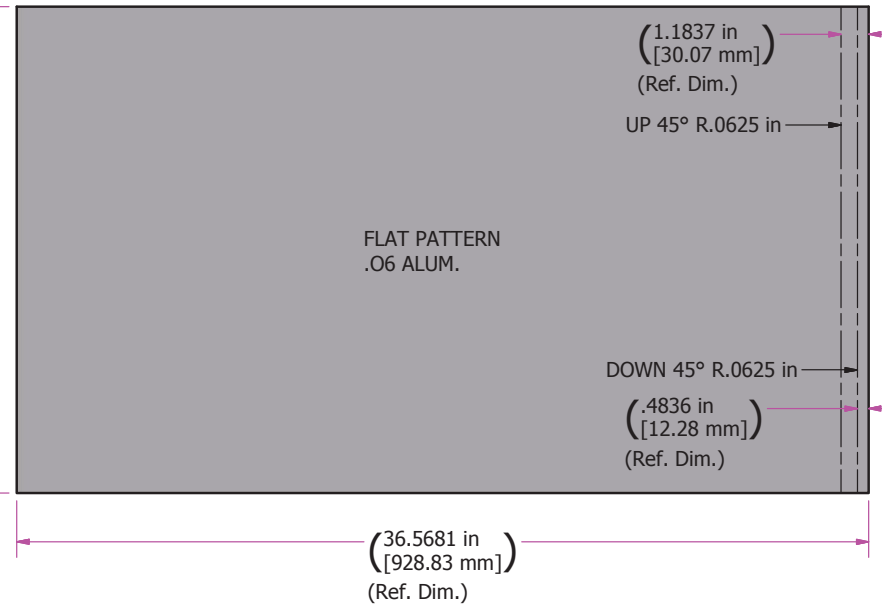
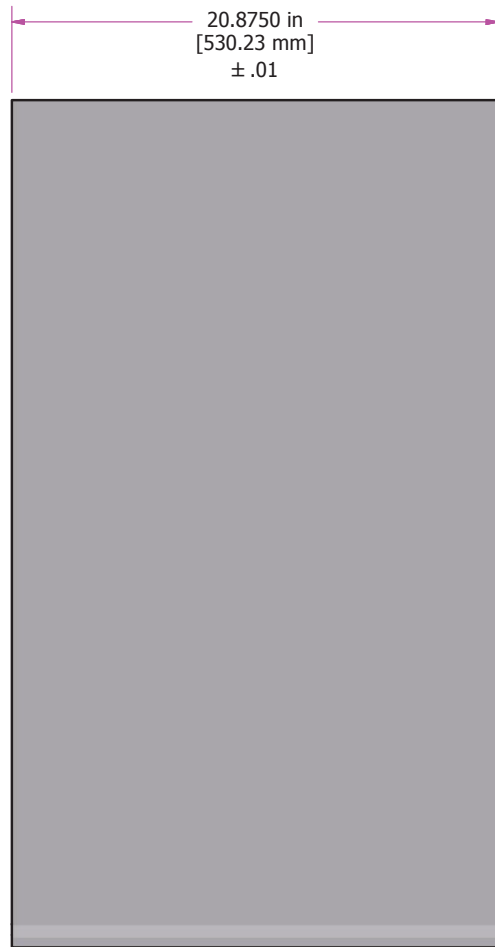
Center Chamber Assembly
1 Each Box



Outside Chamber Assembly
2 Each Box

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 9/1/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B SHEET 17 OF 35 DO NOT SCALE DRAWING		
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		

Double Box Release Machine Sterile Insect Release Box Air Tube Wall- Blank Fabrication Detail

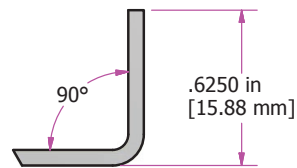
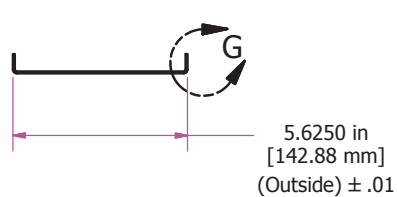


DETAIL D
SCALE 1 : 1

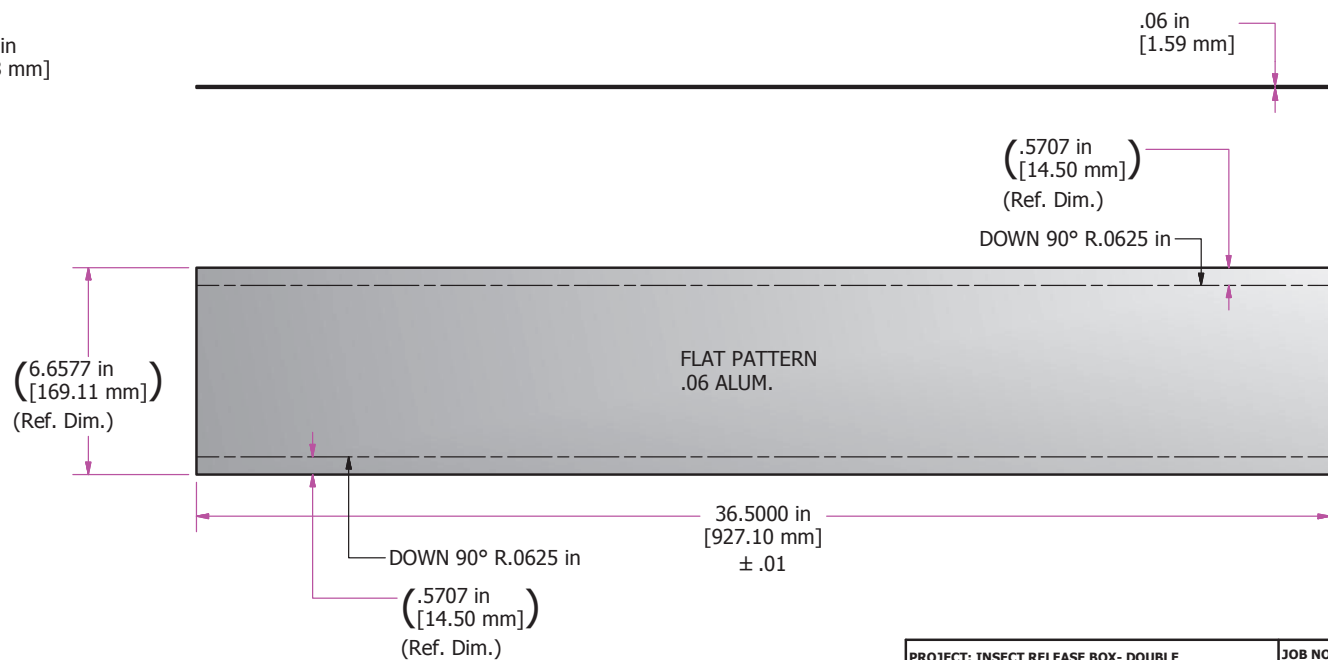
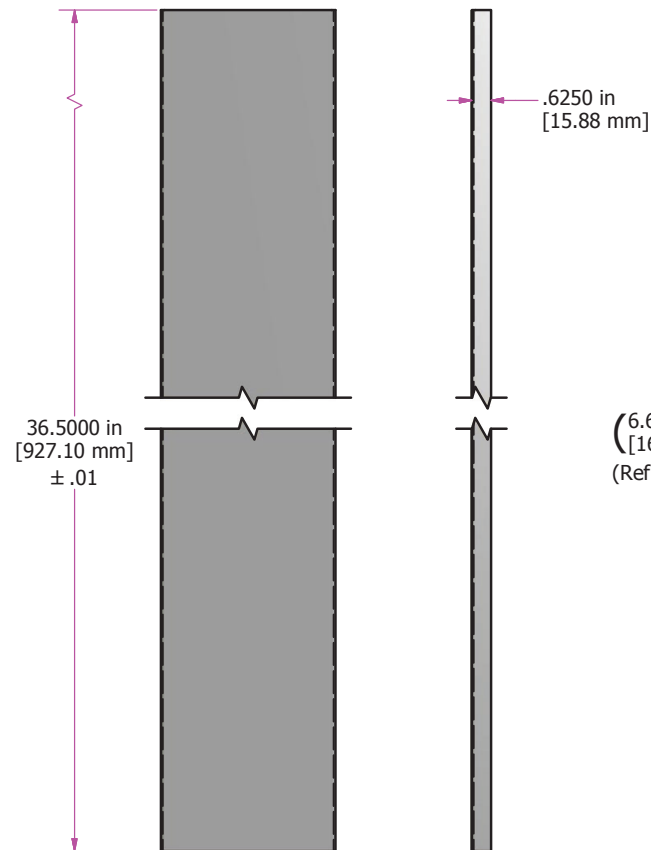
(6) Required Per Box Unit
(72) Min. Pcs Required Minimum for 12 Boxes

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 7/27/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 18 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		

Double Box Release Machine Sterile Insect Release Box Baffle Divider Walls- Blank Fabrication Detail



DETAIL G
SCALE 2 : 1



(12) Required Per Box Unit
(144) Min. Pcs Required Minimum for 12 Boxes

PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/4/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 19 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

4

3

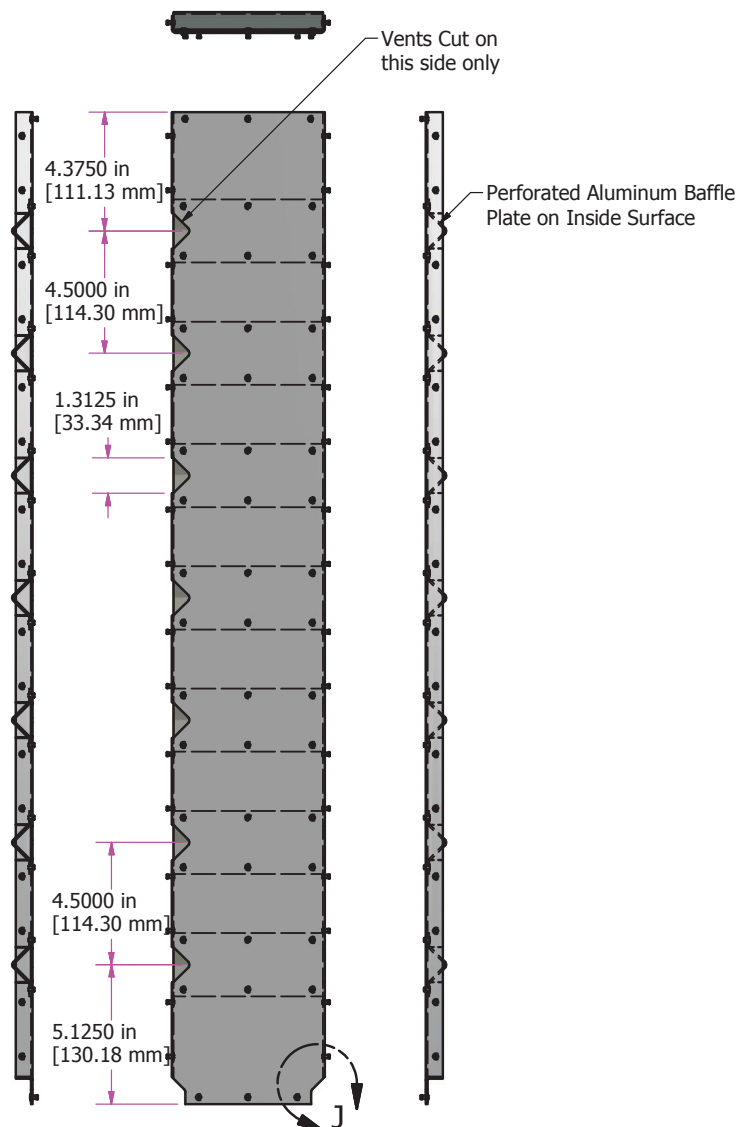
2

1

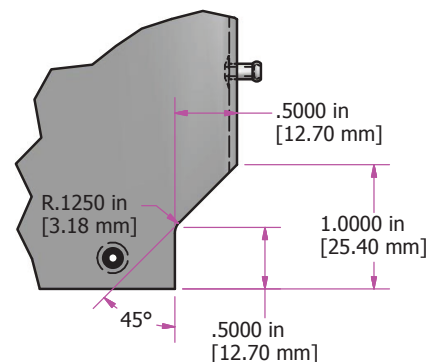
BW-1**Baffle Wall Assembly**

(2) Baffle Assemblys Required Per Box
 (24) Min. Required for 12 Boxes

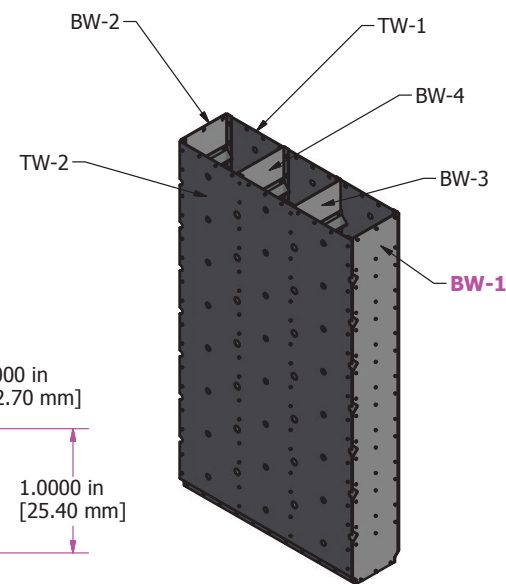
Double Box Release Machine Sterile Insect Release Box Baffle Wall Assembly



Apply to ALL Baffle Walls



DETAIL J
SCALE 1 : 1



Outside Chamber Assembly
 2 Each Box

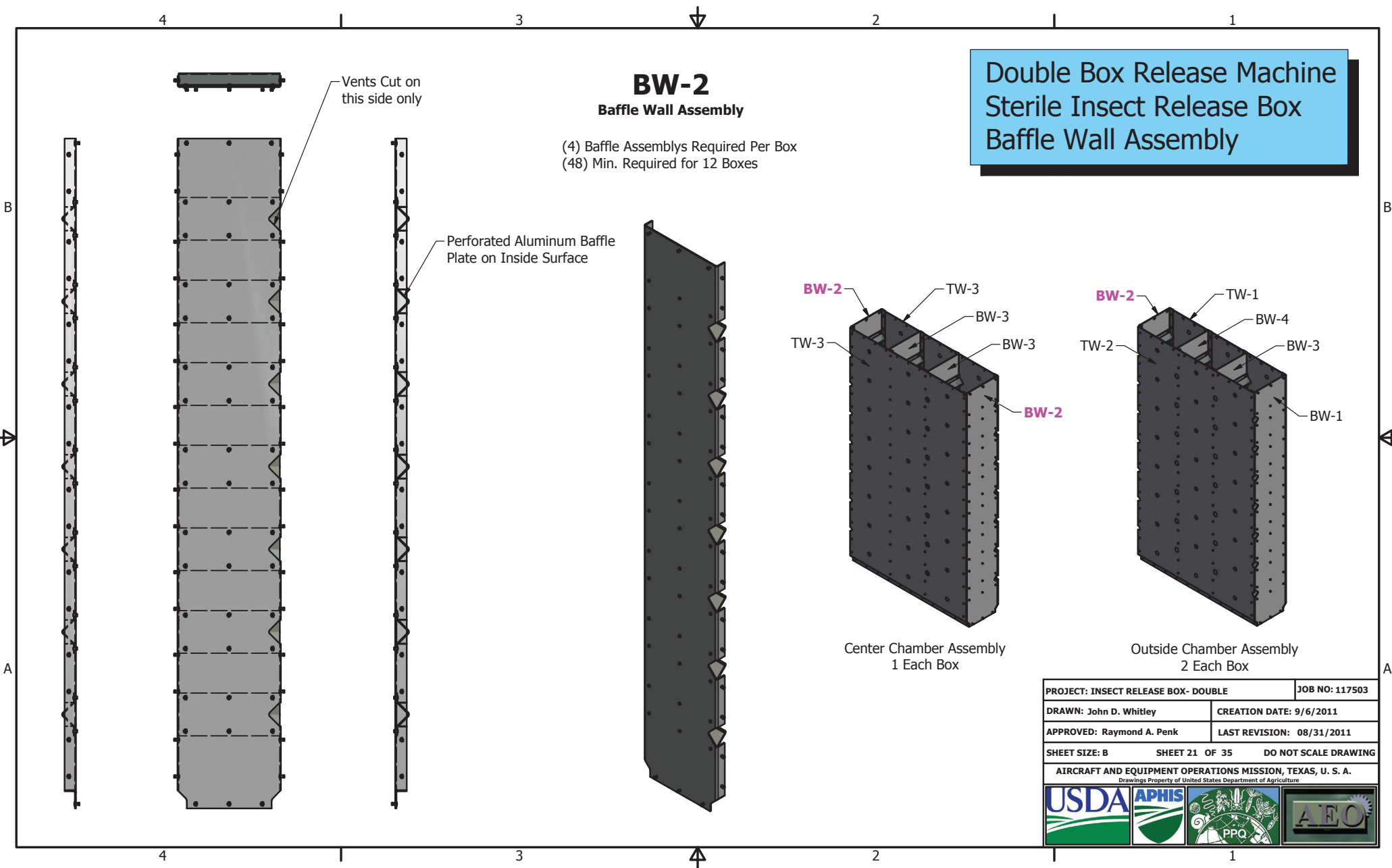
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/5/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 20 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

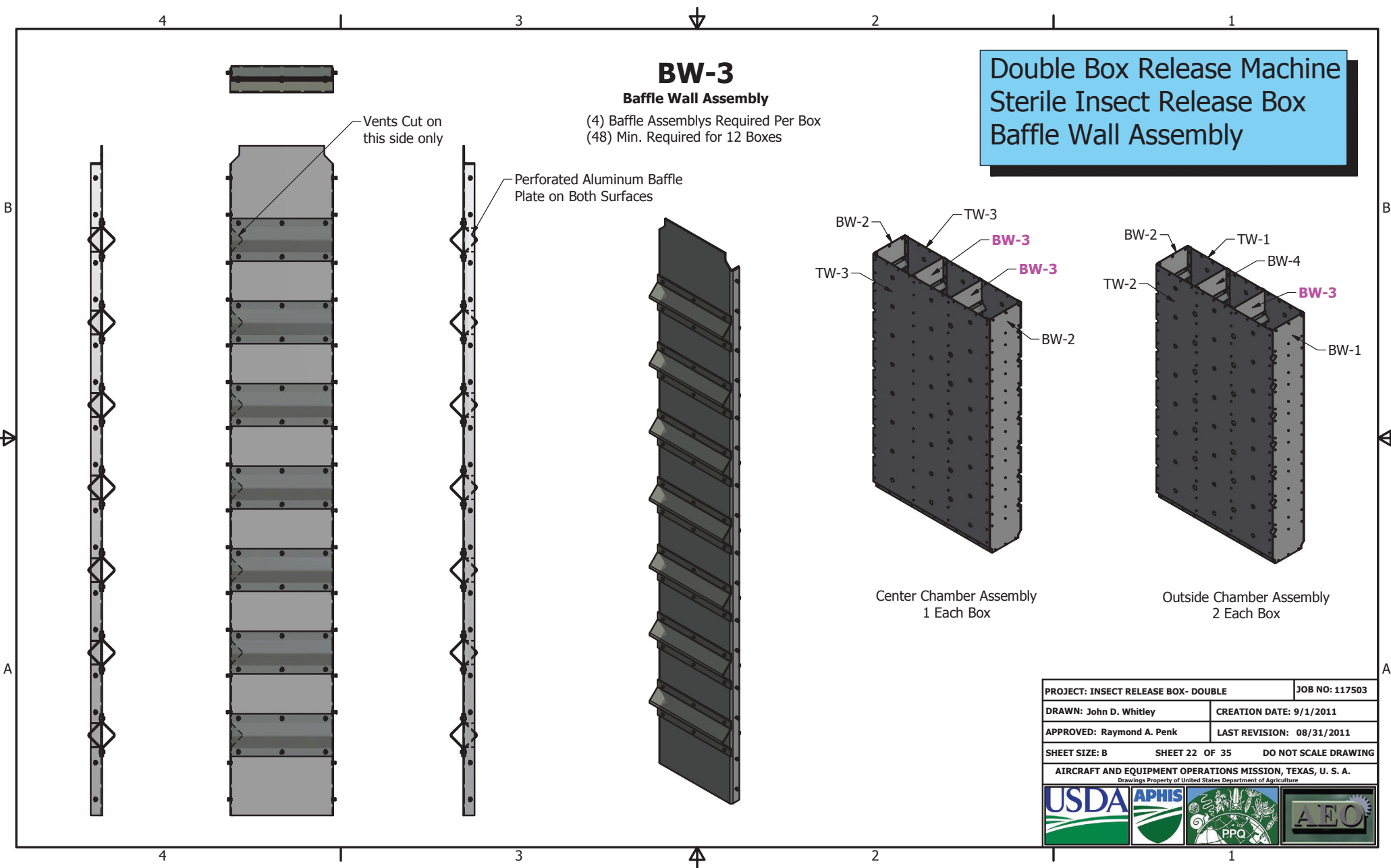
4

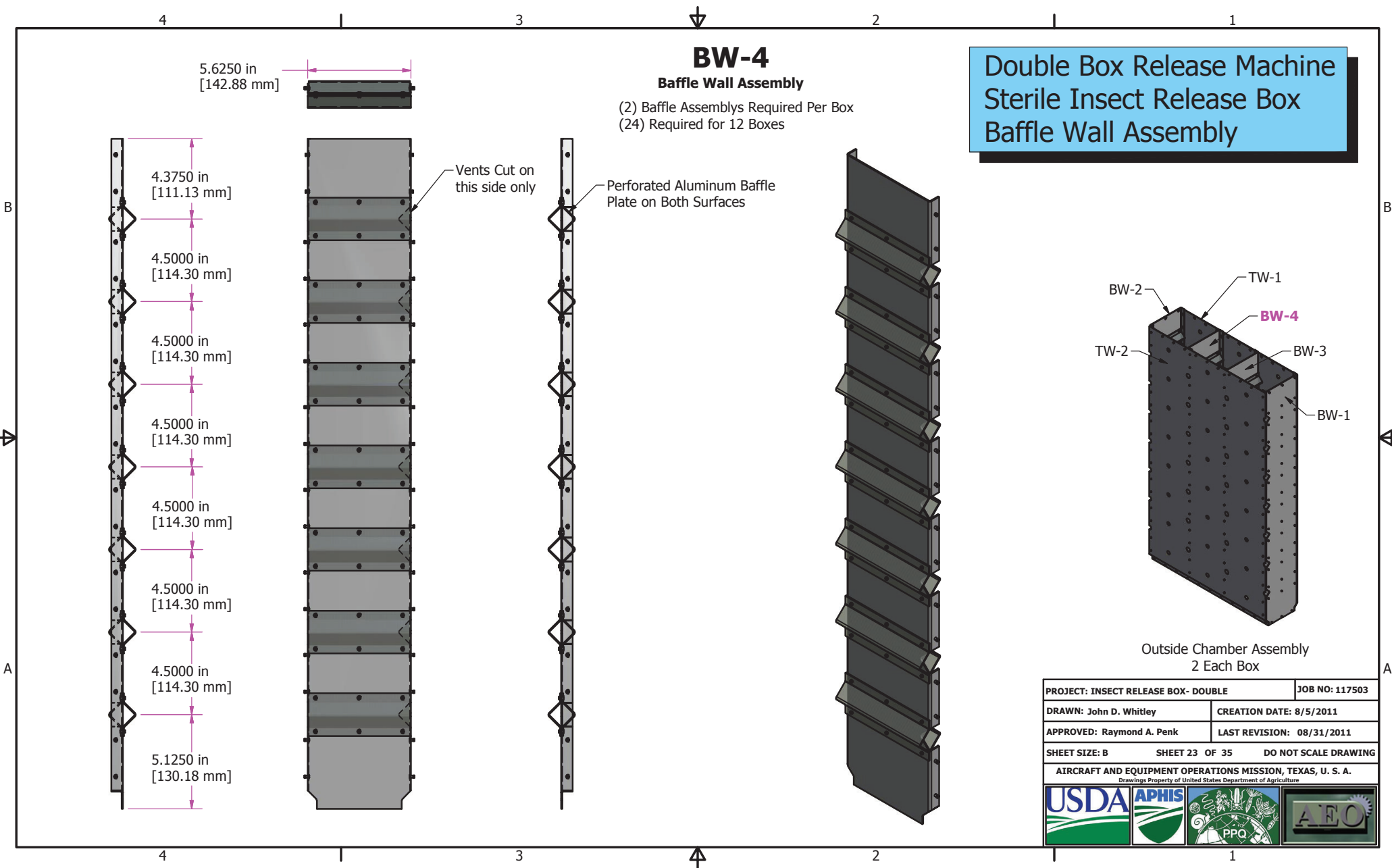
3

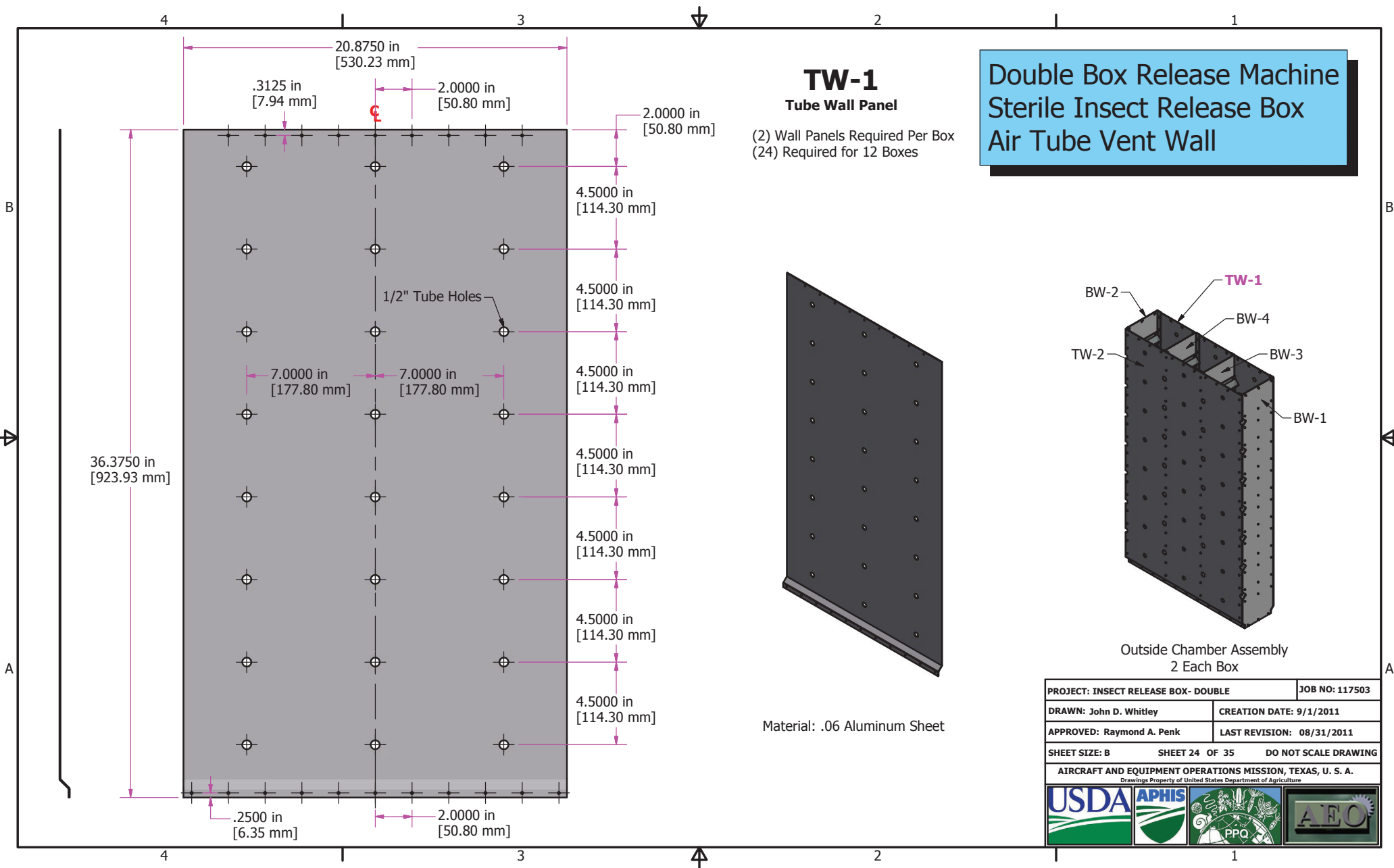
2

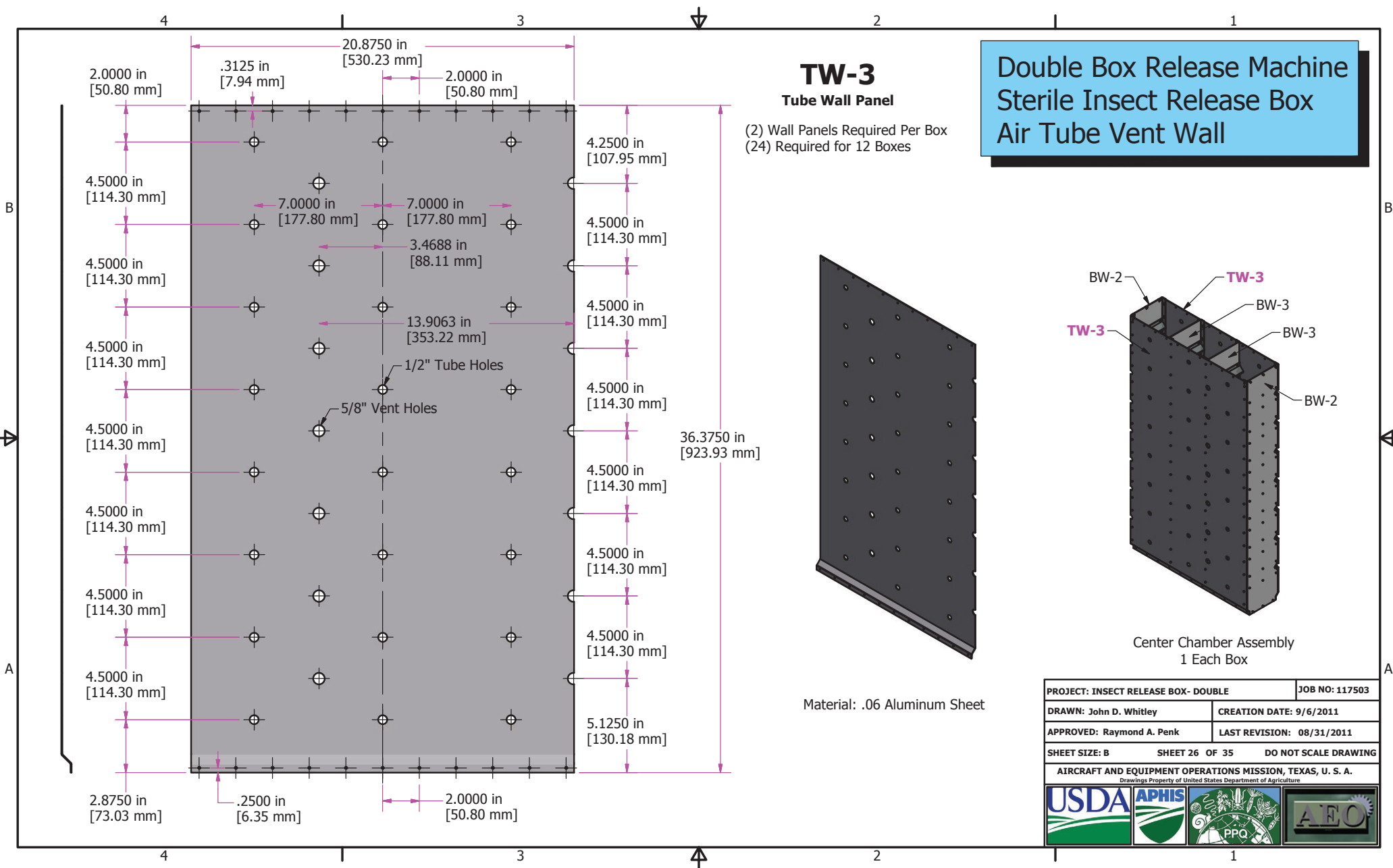
1



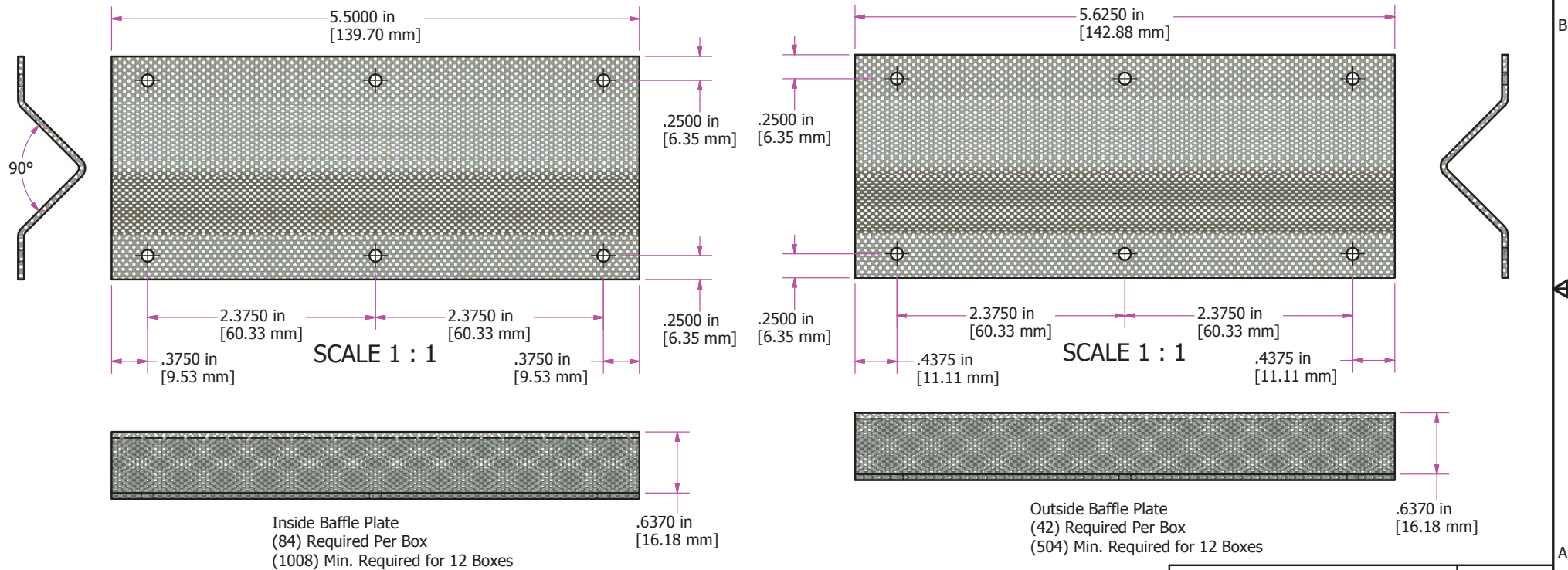






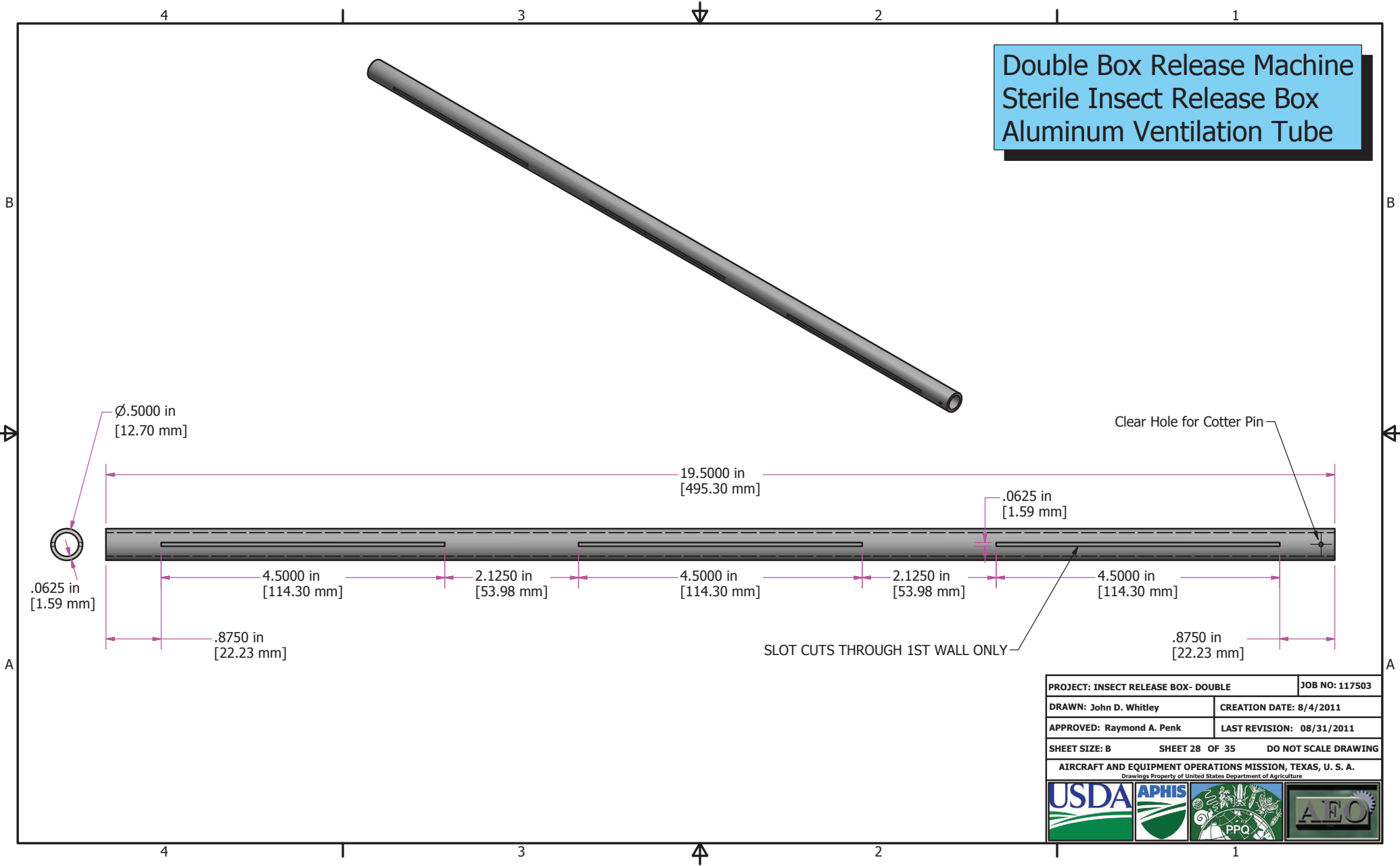


Double Box Release Machine Sterile Insect Release Box Perforated Aluminum Baffles

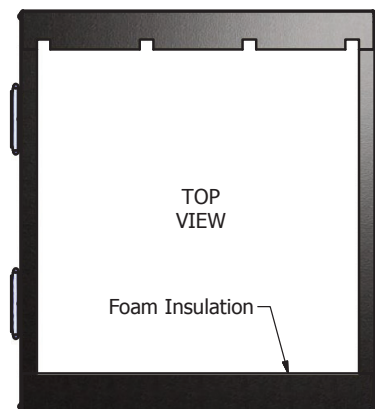
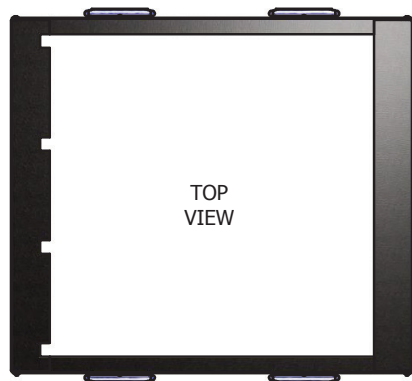


PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/5/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 27 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

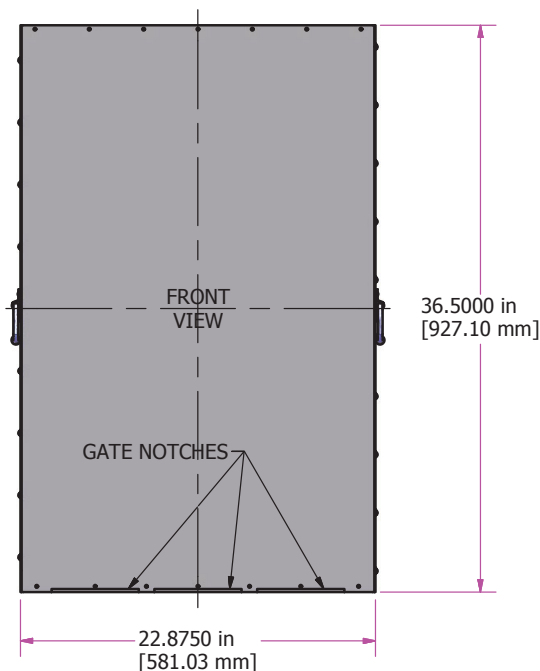
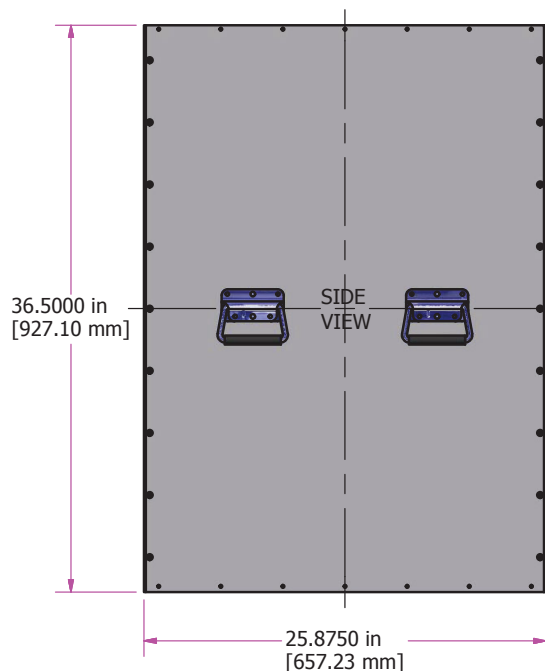
Double Box Release Machine Sterile Insect Release Box Aluminum Ventilation Tube



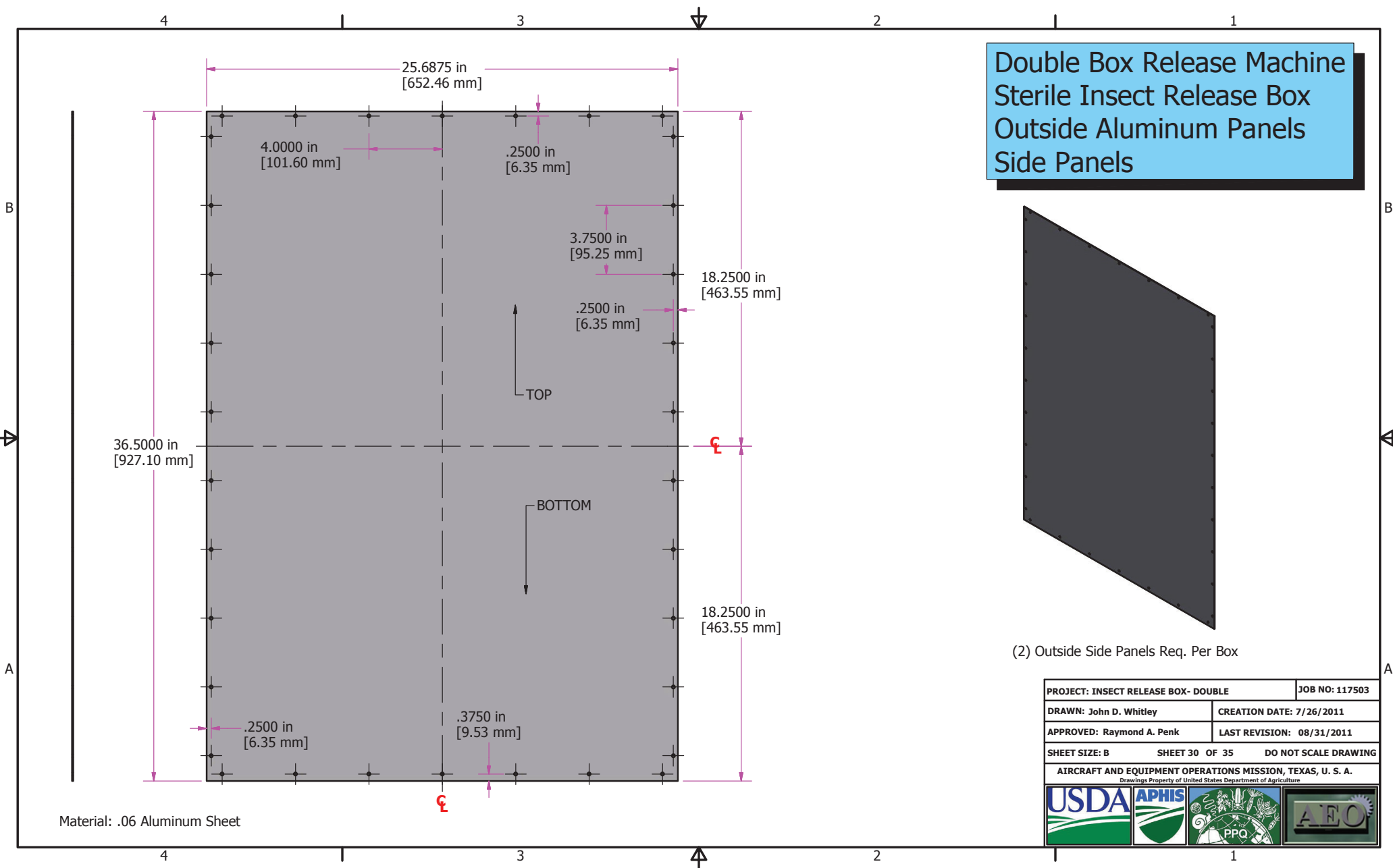
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/4/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B SHEET 28 OF 35 DO NOT SCALE DRAWING		
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		



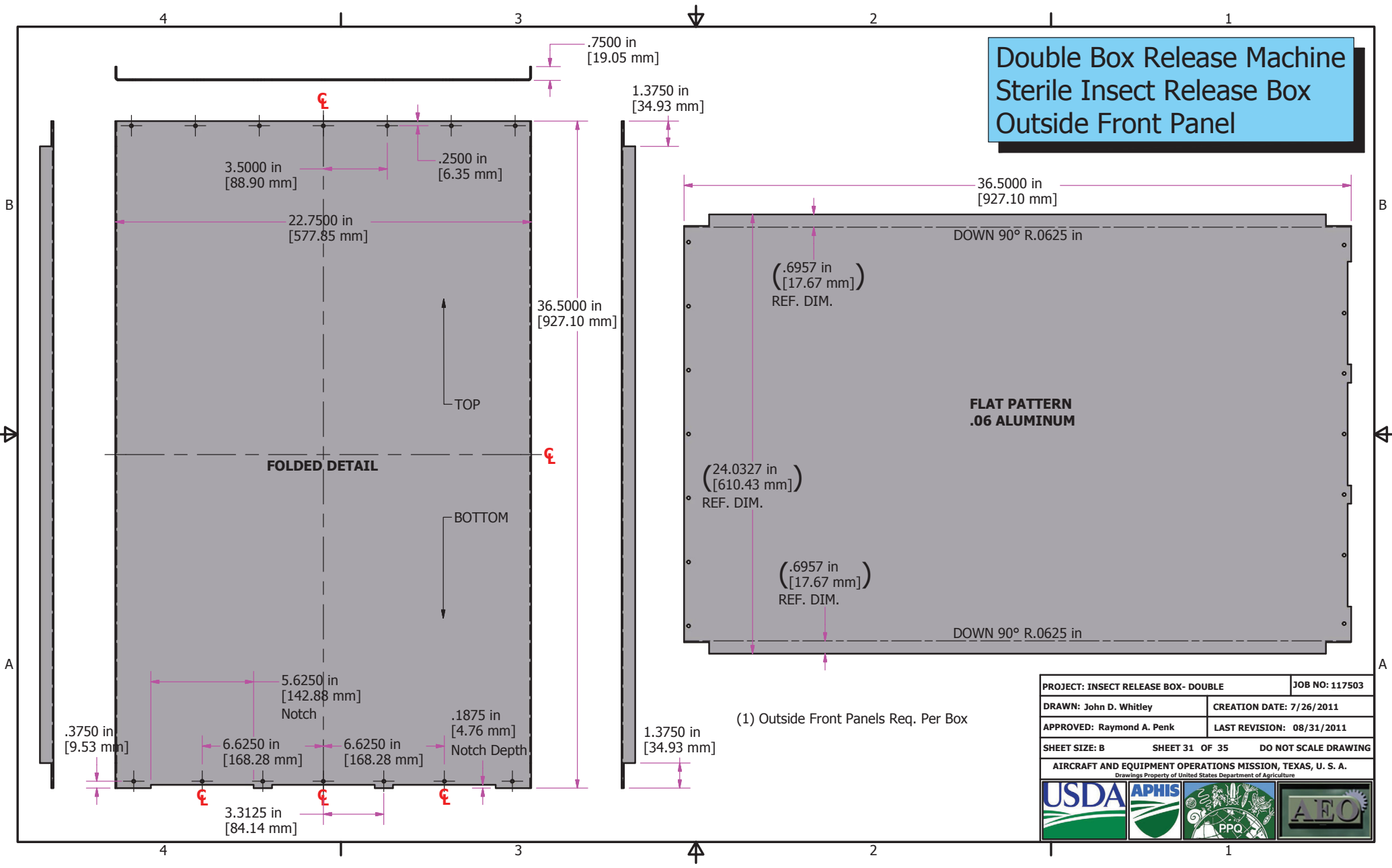
Double Box Release Machine Sterile Insect Release Box Outside Aluminum Panels & Foam Insulation Panels



PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/4/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 29 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

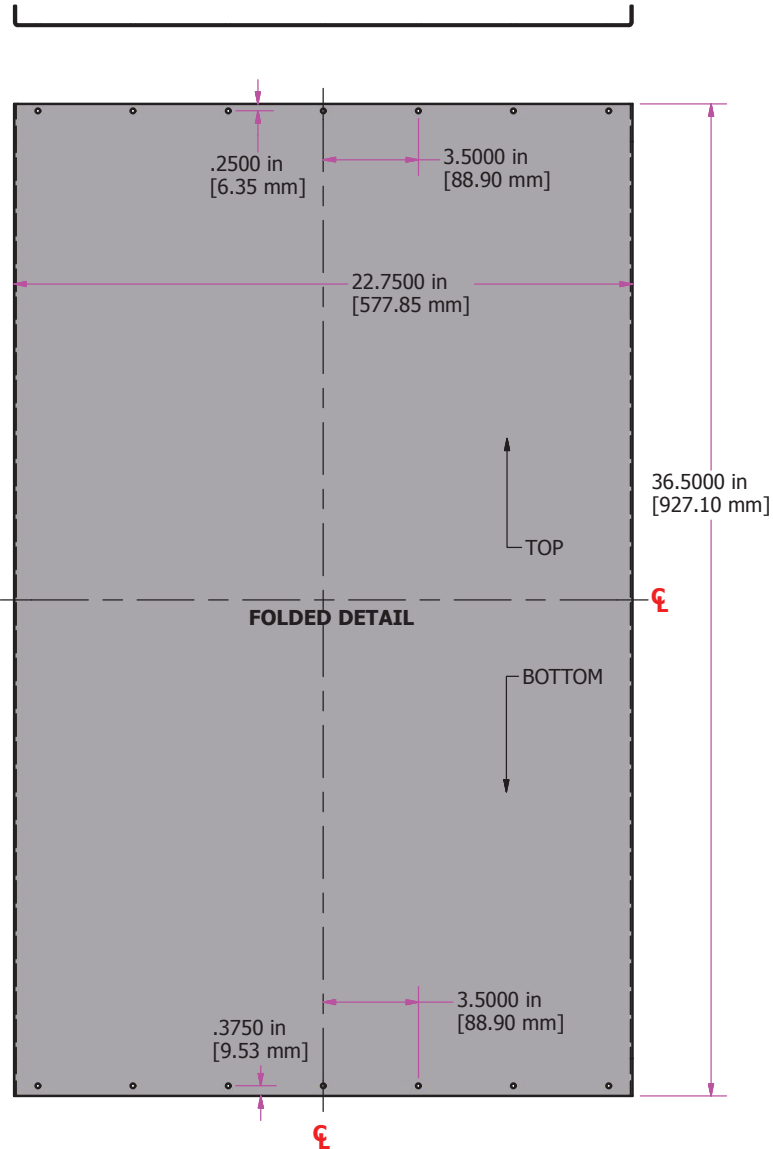


Double Box Release Machine Sterile Insect Release Box Outside Front Panel



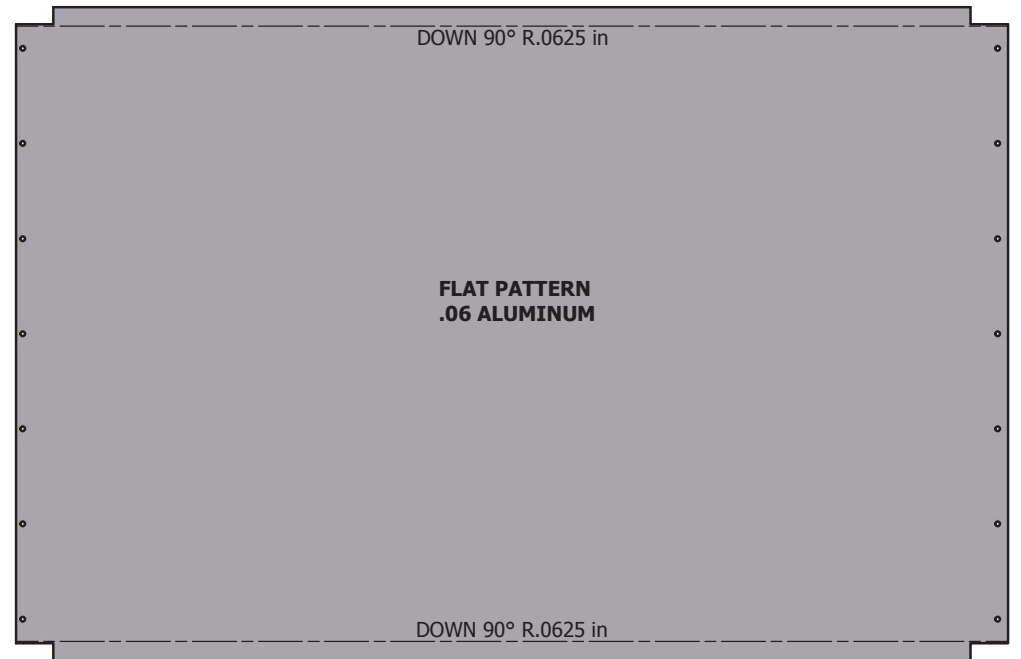
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 7/26/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 31 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

Double Box Release Machine Sterile Insect Release Box Outside Rear Panel



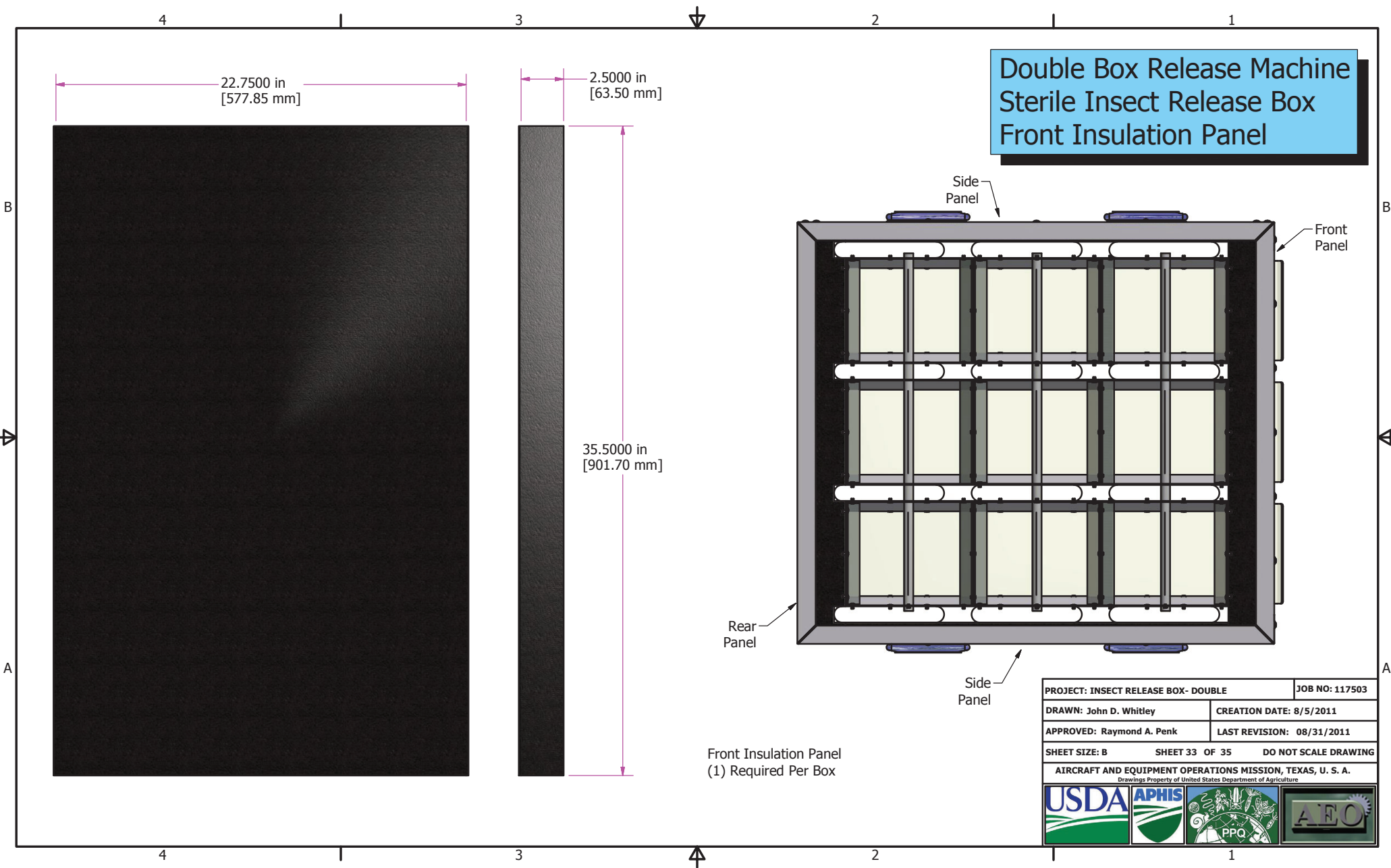
1.3750 in
[34.93 mm]

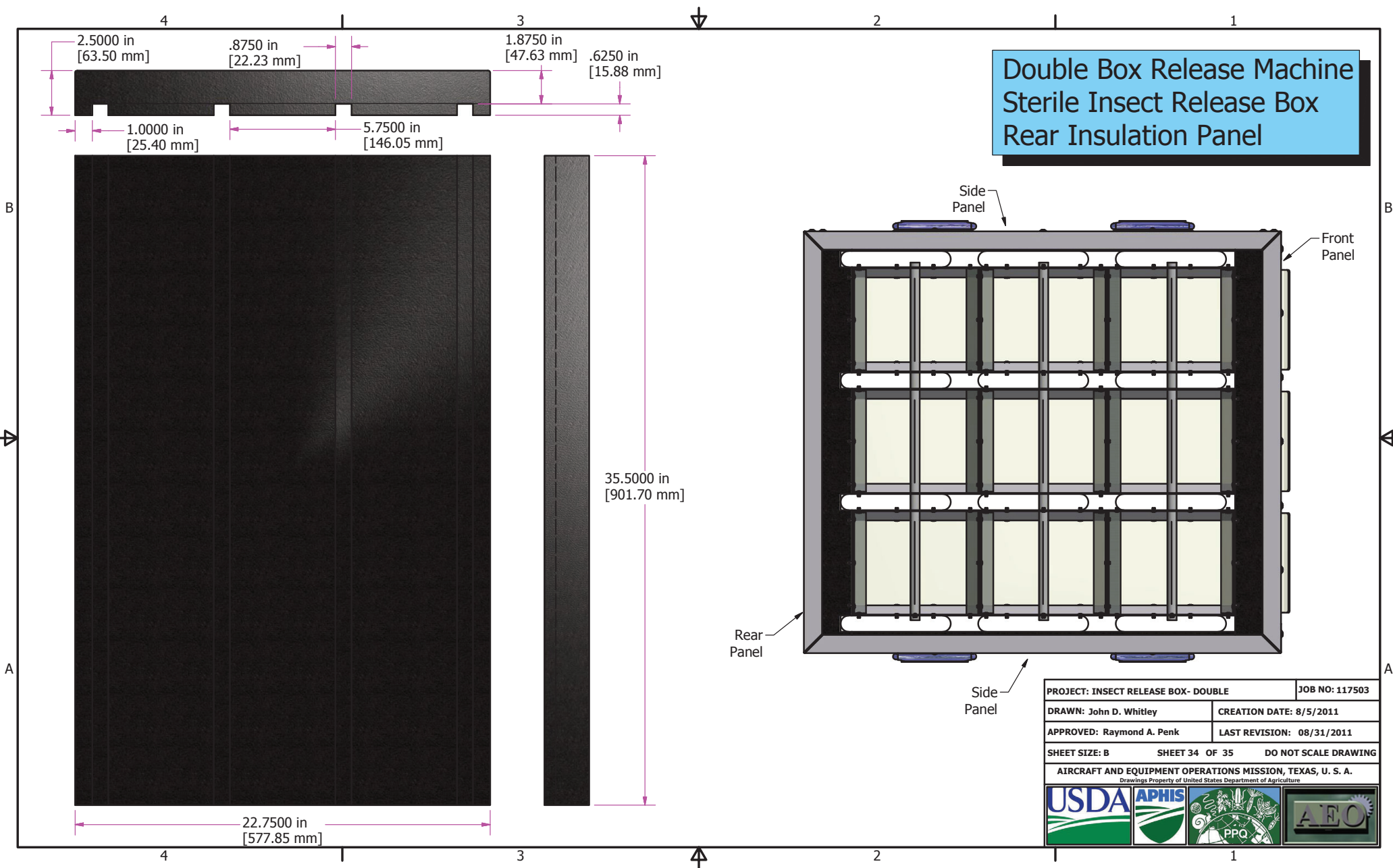
1.3750 in
[34.93 mm]



(1) Outside Rear Panels Req. Per Box

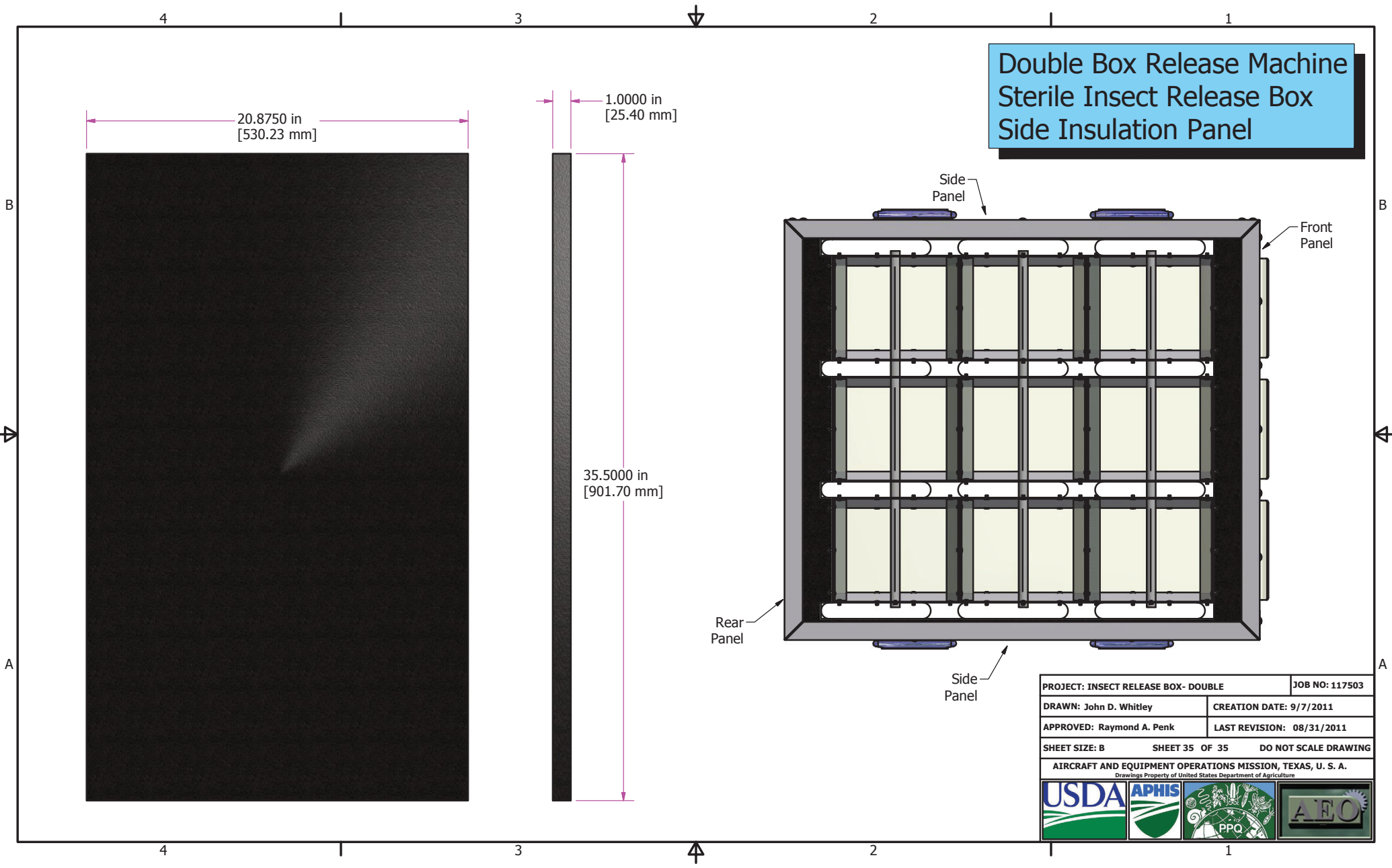
PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 7/26/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 32 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		





PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley	CREATION DATE: 8/5/2011	
APPROVED: Raymond A. Penk	LAST REVISION: 08/31/2011	
SHEET SIZE: B	SHEET 34 OF 35	DO NOT SCALE DRAWING
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A.		
Drawings Property of United States Department of Agriculture		
USDA	APHIS	PPQ
AEO		

Double Box Release Machine Sterile Insect Release Box Side Insulation Panel



PROJECT: INSECT RELEASE BOX- DOUBLE		JOB NO: 117503
DRAWN: John D. Whitley		CREATION DATE: 9/7/2011
APPROVED: Raymond A. Penk		LAST REVISION: 08/31/2011
SHEET SIZE: B SHEET 35 OF 35 DO NOT SCALE DRAWING		
AIRCRAFT AND EQUIPMENT OPERATIONS MISSION, TEXAS, U. S. A. Drawings Property of United States Department of Agriculture		
		
		