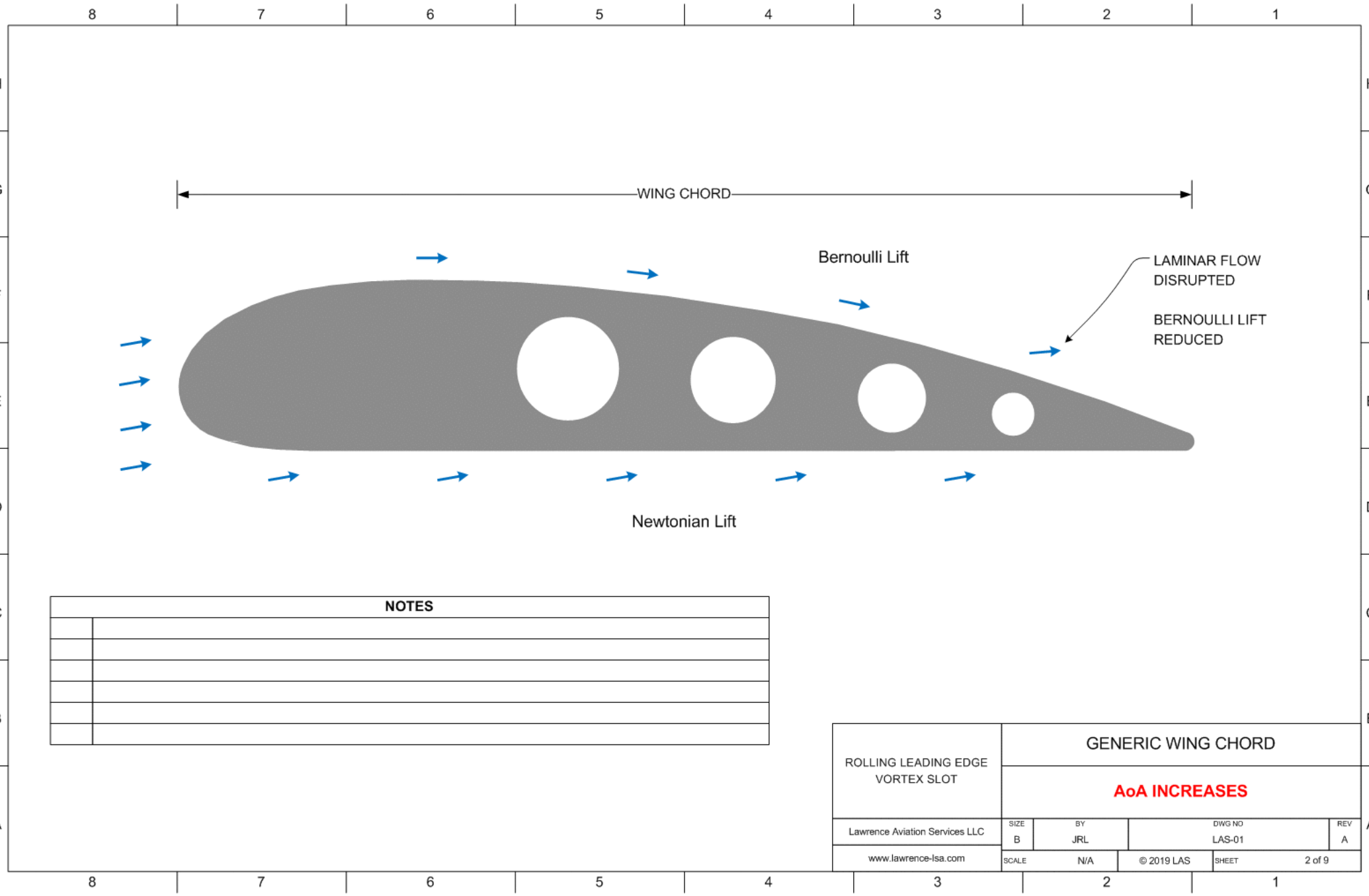


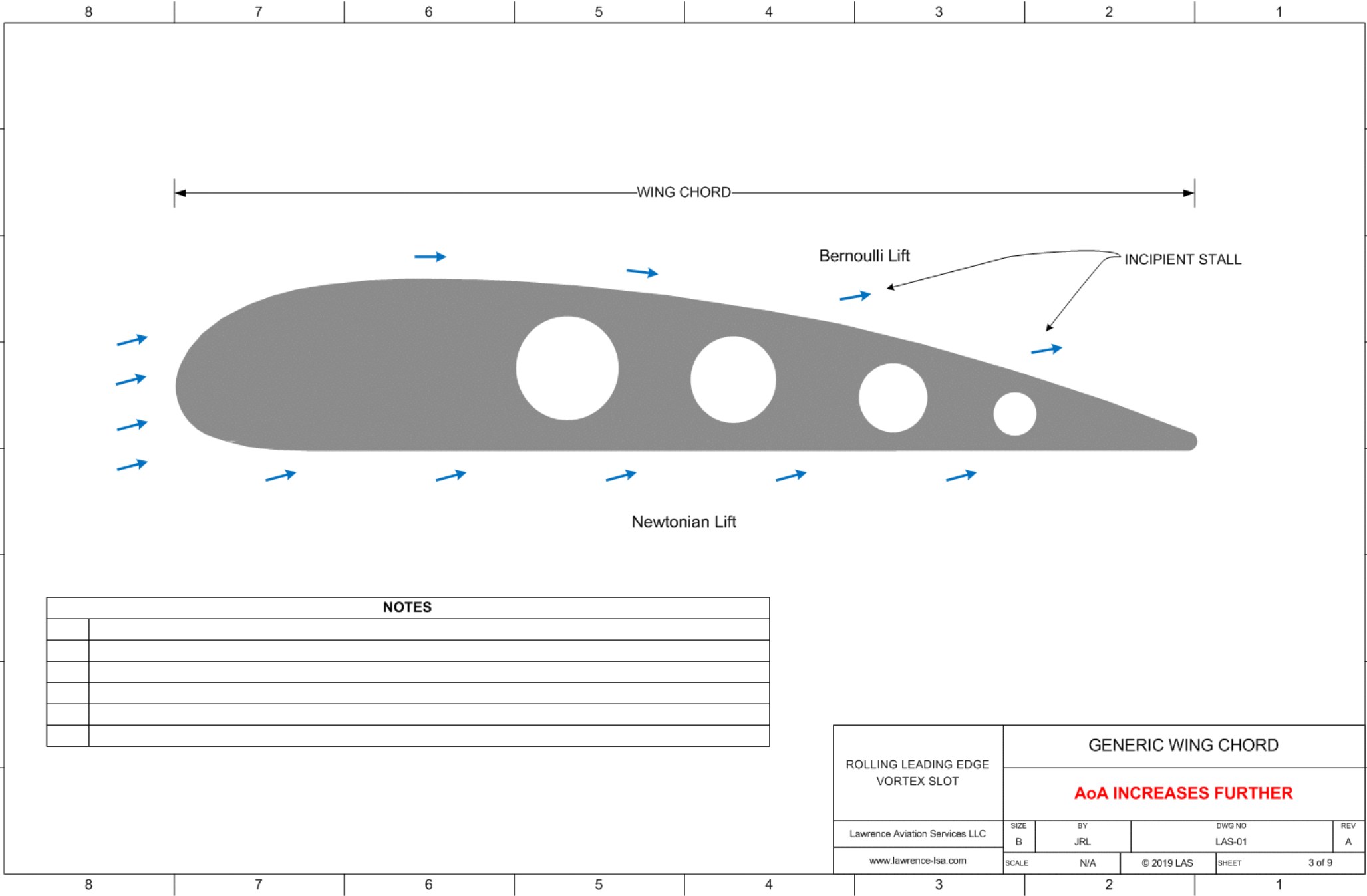
NOTES	

ROLLING LEADING EDGE VORTEX SLOT	GENERIC WING CHORD			
	TYPICAL AIR FLOW AT CRUISE AoA			
Lawrence Aviation Services LLC	SIZE B	BY JRL	DWG NO LAS-01	REV A
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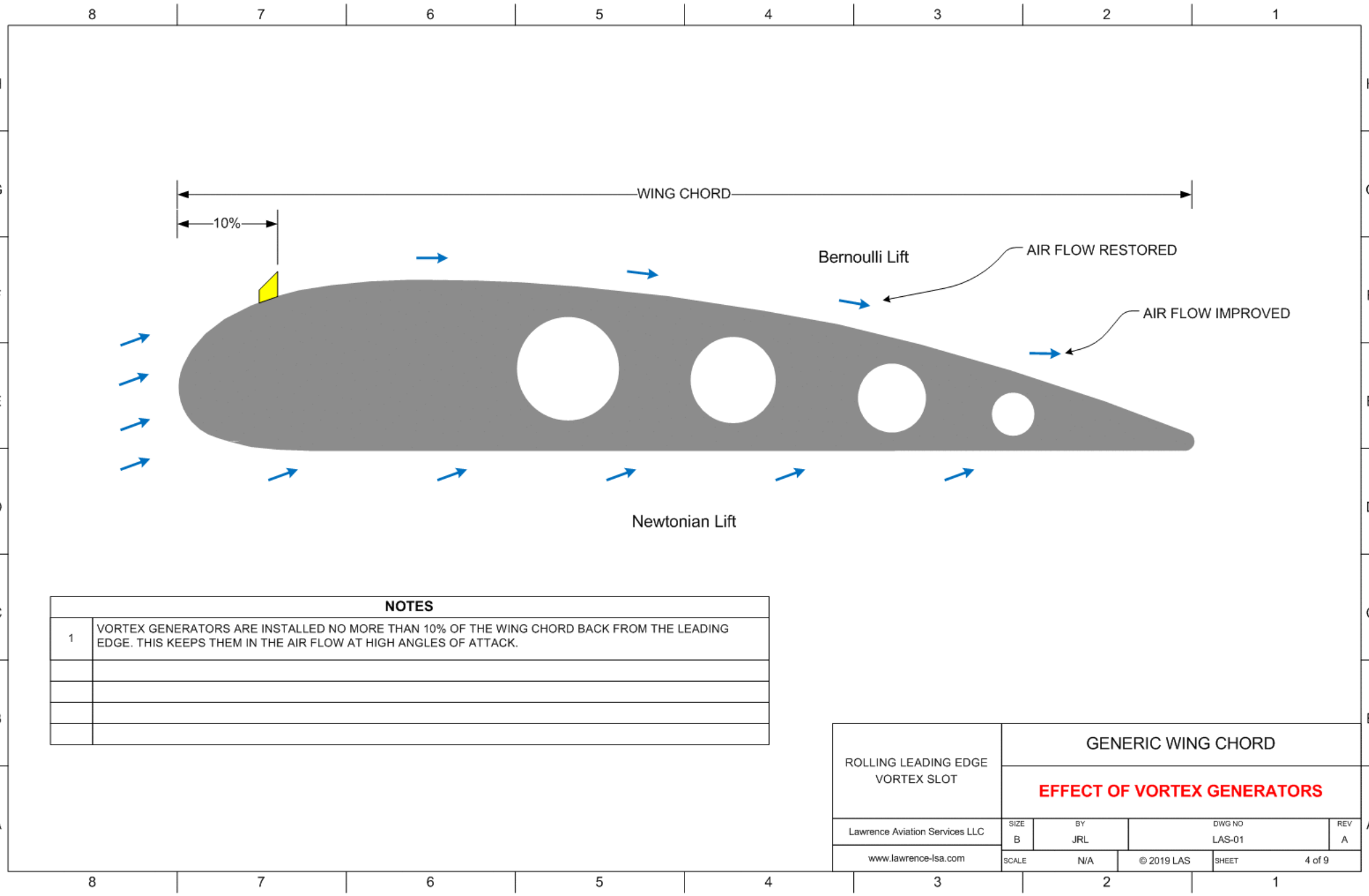
NOTES	

ROLLING LEADING EDGE VORTEX SLOT	GENERIC WING CHORD			
	AoA INCREASES			
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NOTES	

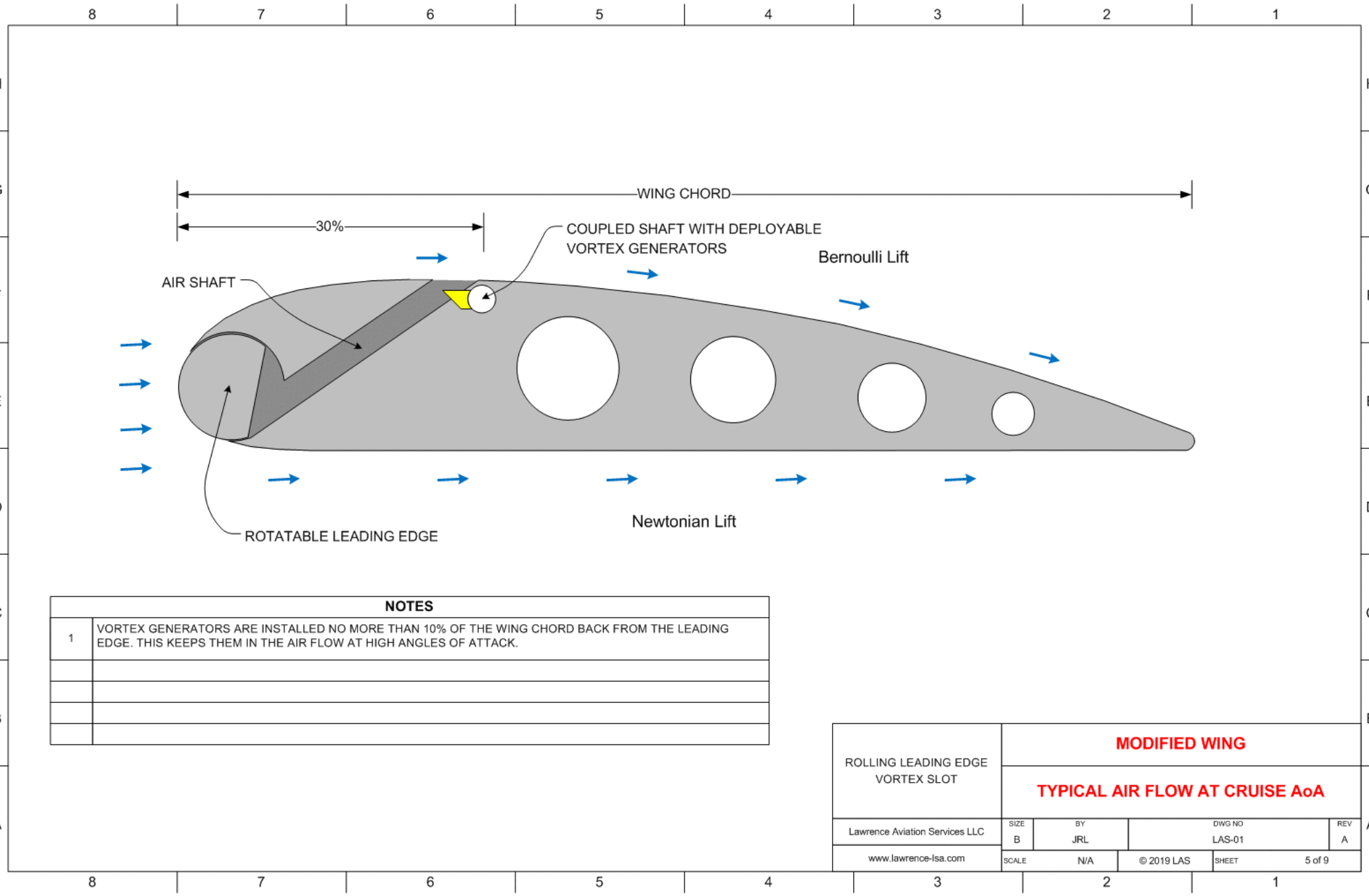
ROLLING LEADING EDGE VORTEX SLOT	GENERIC WING CHORD			
	AoA INCREASES FURTHER			
Lawrence Aviation Services LLC	SIZE B	BY JRL	DWG NO LAS-01	REV A
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NOTES

1	VORTEX GENERATORS ARE INSTALLED NO MORE THAN 10% OF THE WING CHORD BACK FROM THE LEADING EDGE. THIS KEEPS THEM IN THE AIR FLOW AT HIGH ANGLES OF ATTACK.

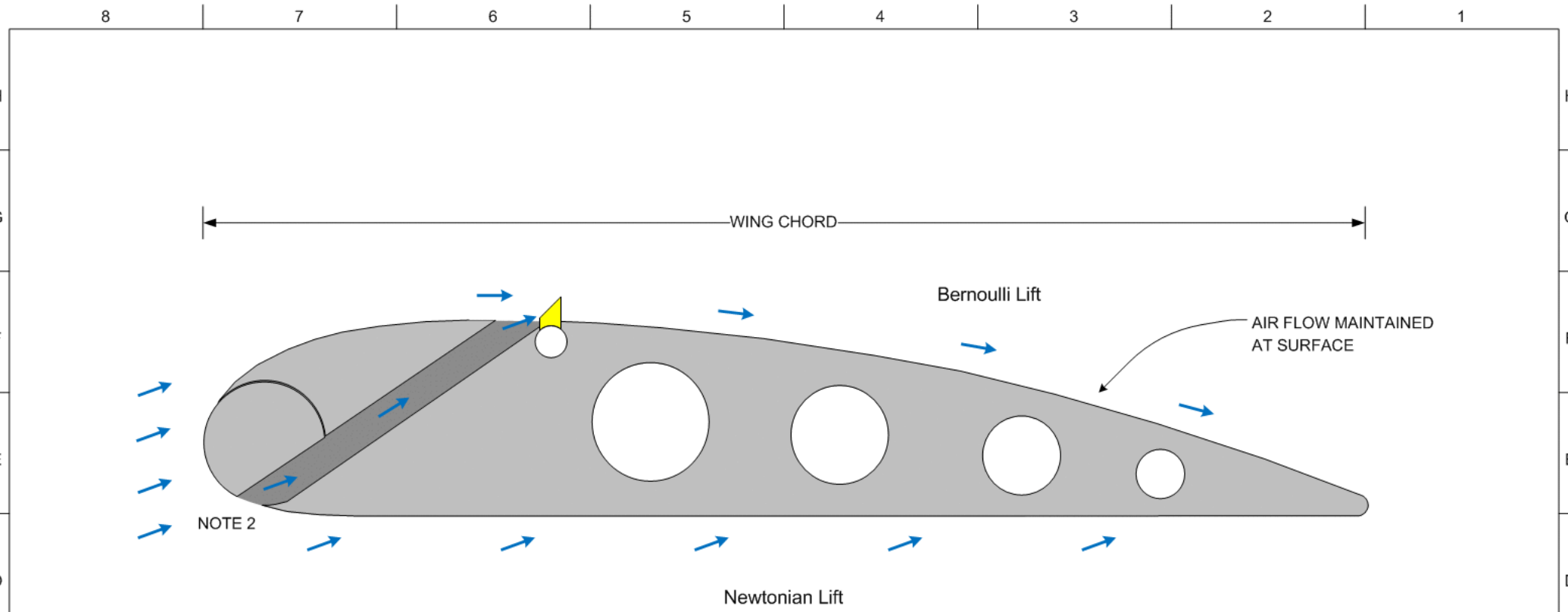
ROLLING LEADING EDGE VORTEX SLOT	GENERIC WING CHORD			
	EFFECT OF VORTEX GENERATORS			
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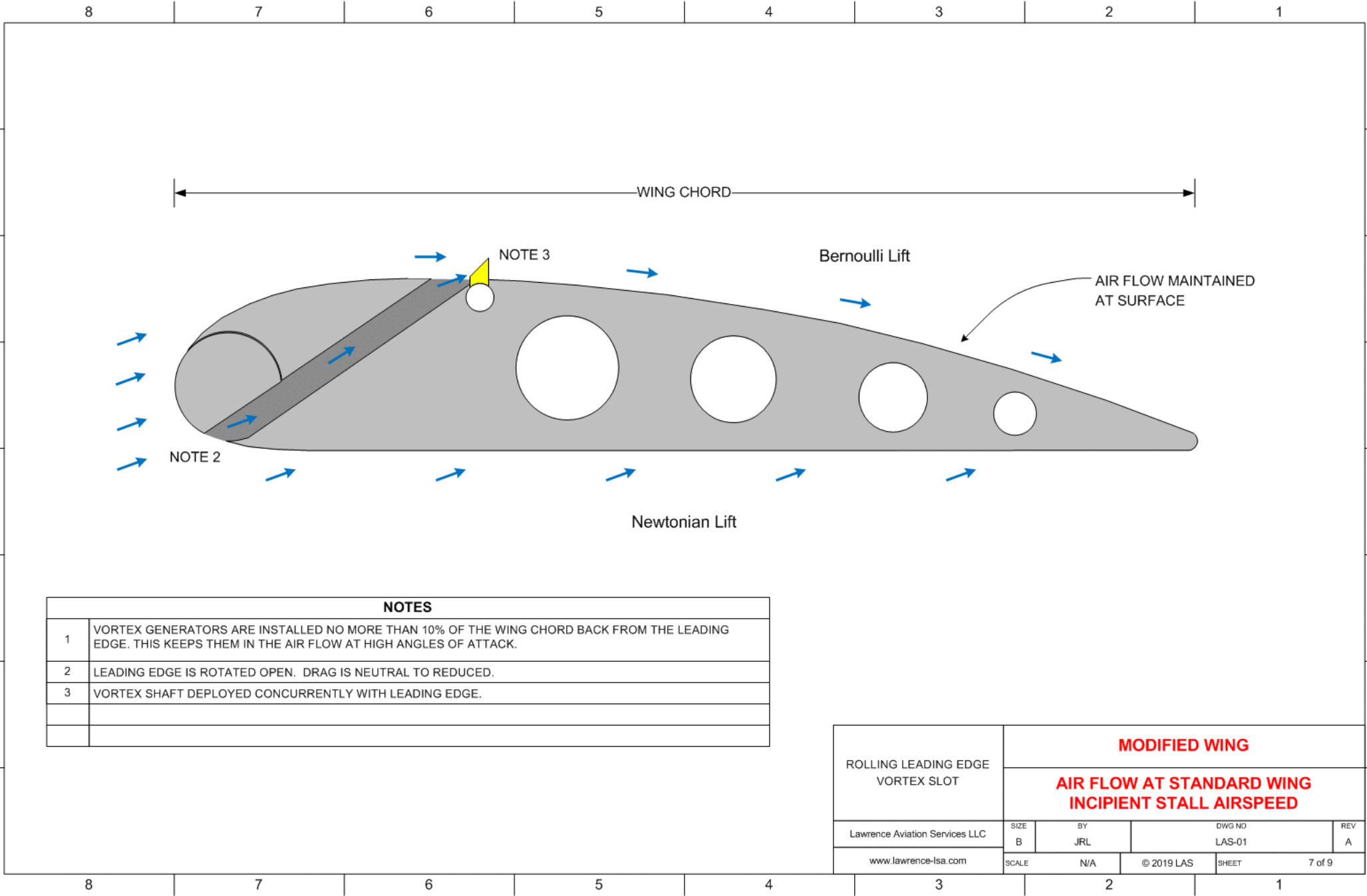
1	VORTEX GENERATORS ARE INSTALLED NO MORE THAN 10% OF THE WING CHORD BACK FROM THE LEADING EDGE. THIS KEEPS THEM IN THE AIR FLOW AT HIGH ANGLES OF ATTACK.

ROLLING LEADING EDGE VORTEX SLOT	MODIFIED WING			
	TYPICAL AIR FLOW AT CRUISE AoA			
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NOTES	
1	VORTEX GENERATORS ARE INSTALLED NO MORE THAN 10% OF THE WING CHORD BACK FROM THE LEADING EDGE. THIS KEEPS THEM IN THE AIR FLOW AT HIGH ANGLES OF ATTACK.
2	LEADING EDGE IS ROTATED OPEN. DRAG IS NEUTRAL TO REDUCED.

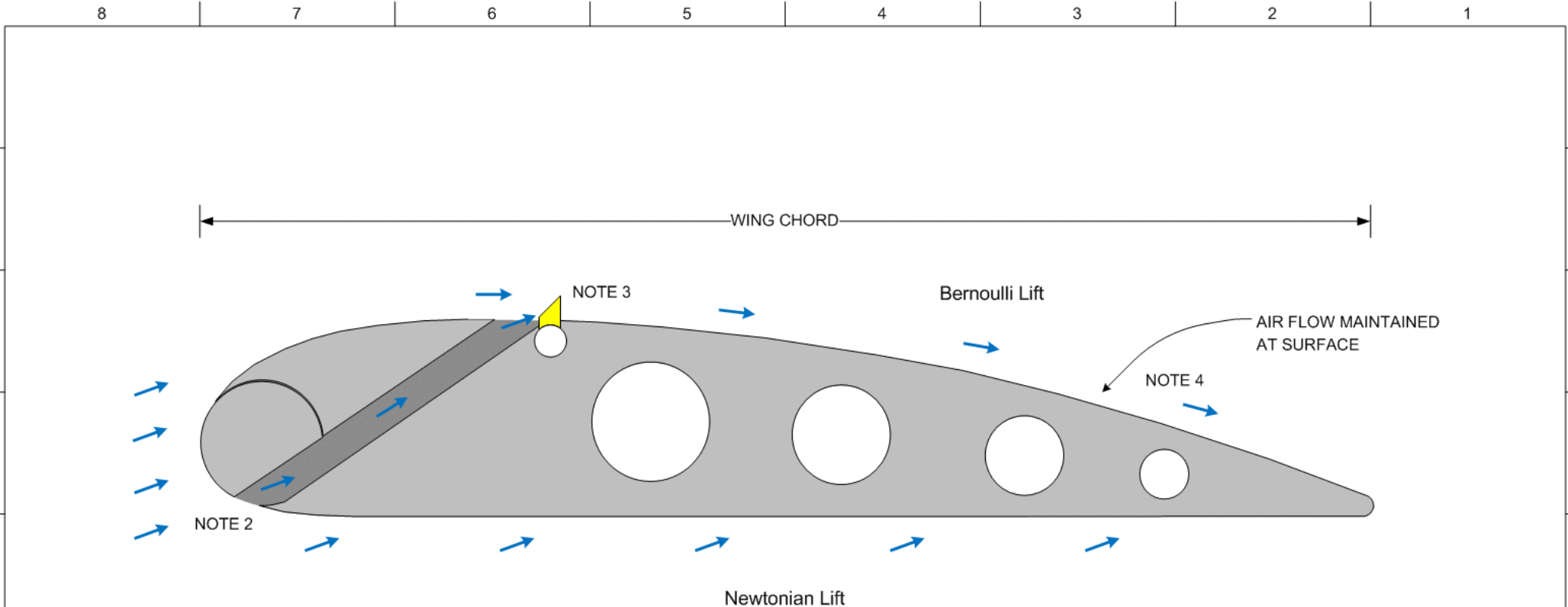
ROLLING LEADING EDGE VORTEX SLOT		MODIFIED WING			
		AIR FLOW AT STANDARD WING INCIPIENT STALL AIRSPEED			
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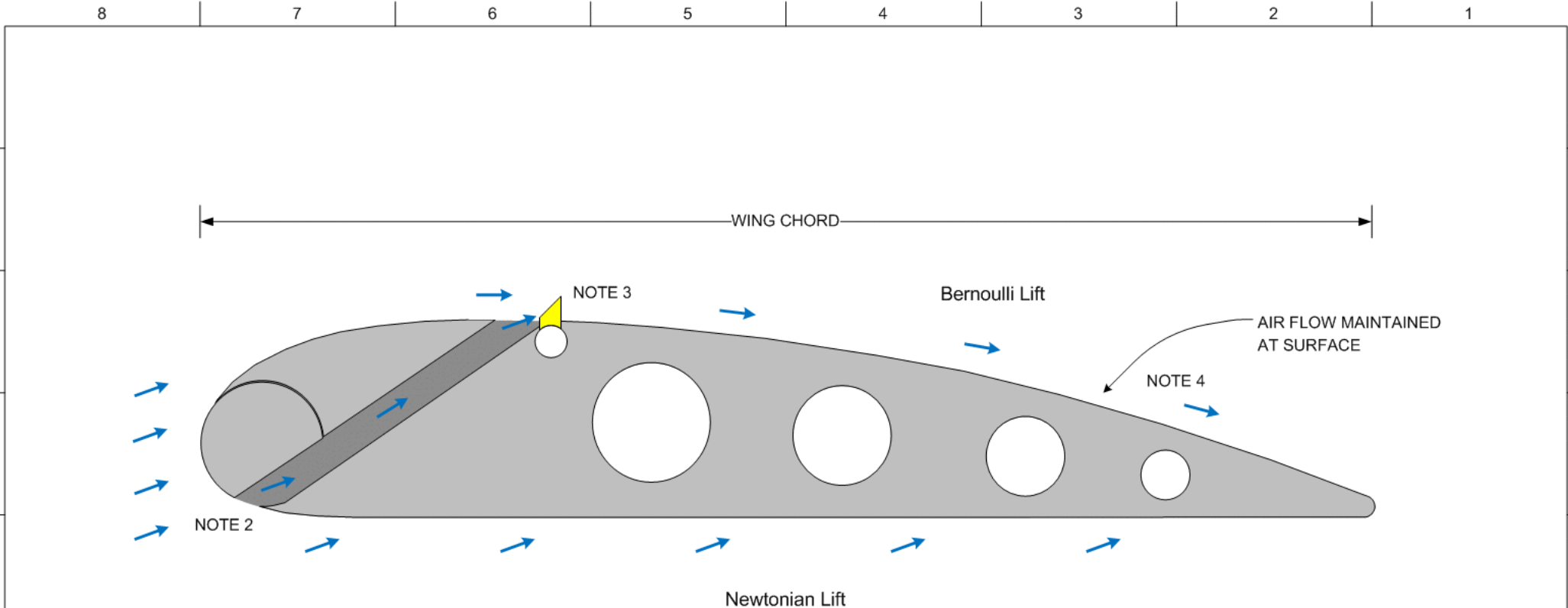
1	VORTEX GENERATORS ARE INSTALLED NO MORE THAN 10% OF THE WING CHORD BACK FROM THE LEADING EDGE. THIS KEEPS THEM IN THE AIR FLOW AT HIGH ANGLES OF ATTACK.
2	LEADING EDGE IS ROTATED OPEN. DRAG IS NEUTRAL TO REDUCED.
3	VORTEX SHAFT DEPLOYED CONCURRENTLY WITH LEADING EDGE.

ROLLING LEADING EDGE VORTEX SLOT	MODIFIED WING			
	AIR FLOW AT STANDARD WING INCIPIENT STALL AIRSPEED			
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NOTES	
1	VORTEX GENERATORS ARE INSTALLED NO MORE THAN 10% OF THE WING CHORD BACK FROM THE LEADING EDGE. THIS KEEPS THEM IN THE AIR FLOW AT HIGH ANGLES OF ATTACK.
2	LEADING EDGE IS ROTATED OPEN. DRAG IS NEUTRAL TO REDUCED.
3	VORTEX SHAFT DEPLOYED CONCURRENTLY WITH LEADING EDGE.
4	AIR FLOW REMAINS ATTACHED TO WING AT A MORE REARWARD POINT ON THE WING CHORD THEREBY MAINTAINING BERNOULLI LIFT AT LOWER AIR SPEED.

ROLLING LEADING EDGE VORTEX SLOT	MODIFIED WING			
	AIR FLOW AT STANDARD WING INCIPIENT STALL AIRSPEED			
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NOTES	
1	VORTEX GENERATORS ARE INSTALLED NO MORE THAN 10% OF THE WING CHORD BACK FROM THE LEADING EDGE. THIS KEEPS THEM IN THE AIR FLOW AT HIGH ANGLES OF ATTACK.
2	LEADING EDGE IS ROTATED OPEN. DRAG IS NEUTRAL TO REDUCED.
3	VORTEX SHAFT DEPLOYED CONCURRENTLY WITH LEADING EDGE.
4	AIR FLOW REMAINS ATTACHED TO WING AT A MORE REARWARD POINT ON THE WING CHORD THEREBY MAINTAINING BERNOULLI LIFT AT LOWER AIR SPEED.

THE ROLLING LEADING EDGE VORTEX SLOT PROVIDES A METHOD OF REDUCING STALL SPEED WITHOUT INCREASING DRAG. THIS METHOD CAN BE APPLIED SYMETRICALLY OR ASYMETRICALLY TO THE INSIDE WING IN A LOW SPEED TURN IN ORDER TO MITIGATE THE TENDENCY FOR THE INSIDE WING TO STALL AND START A SPIN.

Patent Pending
Notice of Allowance Issued

ROLLING LEADING EDGE VORTEX SLOT	MODIFIED WING			
	AIR FLOW AT STANDARD WING INCIPIENT STALL AIRSPEED			
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