I would like to introduce a simple and safe method of using two off-the-shelf separate medical devices that together provide a rapid, safe and reliable method of oral endotracheal intubation. At the end of this document is a case report of an actual use of the two devices to manage a difficult clinical scenario.

As with any new medical technique, I suggest that any physician or other medical professional that wishes to learn and practice this technique do so first on an intubation mannequin first, then when sufficient technical skill develops and confidence builds, this technique may be used during routine elective surgical procedures that require endotracheal intubation. Patient selection is key when learning this new technique: Select only patients that you judge easy to ventilate and Intubate with standard laryngoscopic techniques and equipment in the event that your attempt to use this new technique fails or doesn’t go as planned. This is the safest and most ethical way of approaching the learning of new techniques in our patients. Of course, you attempt and learn this new technique at your own discretion, I accept no liability for the mishaps of others...only my own.

**FIRST THINGS FIRST…THE 6 P’S:**

_Proper preparation prevents a piss-poor performance._

Take extra time to prepare the Levitan Stylet and ILA for intubation. ETT overall length must be adjusted to 30 cm maximum length (7.0 ETT from Mallinkrodt is 30 cm long exactly, all larger tubes must be trimmed). Both the ETT, Levitan scope and interior of the ILA must bee lubricated with silicone-based lubricant. Anything else is not good enough. Be sure to avoid getting silicone lubricant on the floor—it will cause chaos. It’s only funny until someone gets hurt (makes the floor super-slippery).
Step 1 (Figure 2): Bend Levitan Stylet Distal Tip 39 degrees 1 cm from tip. Overall Stylet shape should be mostly straight with a gentle scythe shaped curve distally, although it may also be largely straight as shown in this picture since ultimately the stylet will simply compress the patient’s tongue in to the thyromental gap if you leave it straight. Suit Yourself.
Step 2 (Figure 3): Trim ETT to 30 cm overall Length. Save 15mm Connector for later use.

Step 3 (Figure 4): Lubricate Stylet, Interior and Exterior with Silicone Lubricant
Step 4 (Figure 5 and 6): Load ETT On Levitan Stylet Without 15 mm Connector. Tip of Levitan Scope remains just inside the ETT.

Step 5 (Figure 7): Lubricate The Inside of the ILA at the proximal end and at the distal end with the Silicone lubricant, then slide the ETT/Levitan Stylet through to distribute the lubricant. Remove ETT/Levitan stylet and prepare to insert ILA into patient in the usual and customary manner of a supralaryngeal airway. Lubrication of this sort can be performed with the ILA insitu, but it makes the technique a bit more tricky.
Step 6 (Figures 8-10): Remove (and keep) the white connector from the ILA and insert the ETT/Levitan Stylet combination through the ILA. Begin looking in the eyepiece as the tip of the scope disappears inside the blue part of the ILA. Visualize vocal cords and pilot the ETT/Levitan Stylet combination between the vocal cords, then further advance the ETT off the stylet to complete the intubation. Insert 15 mm connector into ETT and inflate ETT cuff for ventilation. Ventilate patient and auscultate lungs and check end-tidal CO2 for intubation confirmation.

Figure 8
Step 7: Removal of the ILA over the ETT can be performed per the manufacturer’s instruction, however, it is not necessary if you do not want to do it. Alternatively, because the Levitan stylet has a small angled portion at the tip, I have used the Levitan Stylet as the device to perform this procedure of removing the ILA, although it’s a bit more difficult (and risky) than using the white exchange stylet that comes with the ILA.
Now, a bit of advice.

Failure with this technique will occur inevitably as it does when anyone learns something new. Indeed, I believe that I learn more from failure than I do from when everything goes according to plan. To rely on this technique in an emergency situation, the individual using this equipment should have practiced this procedure repeatedly on patients in whom failure to Intubate with this technique would not present a danger to patient safety, i.e., patients with “Normal” airways. I would say that realistically you should not rely on this technique until you have performed it on at least 10 patients with normal airways.

Additionally, it is the opinion of this author that this technique is only appropriate in the patient with an “Unrecognized Difficult Airway”. That the situation in which you anesthetize a patient and “lo and behold” you cannot Intubate with direct laryngoscopy.

If your patient has a recognized difficult airway, I would not recommend this technique, I would recommend intubation under sedation. Given an appropriate topical anesthetic and intravenous sedation, an “Awake Intubation” can be performed with the Levitan Stylet or even conceivably through the ILA as detailed above. The Decision is up to you because you are the professional. By the way, I dislike the term “Awake Intubation”. We should all be saying “Intubation Under Sedation”—that way we don’t scare our patients, surgeons, nurses, colleagues and ultimately ourselves.

May you all find this technique useful and enjoy your practice of medicine.

May The Road Rise Up To Meet Your Feet (And not your face), and May The Wind Always Be At Your Back.

Respectfully,

James C. DuCanto, M.D.
Fiberoptic Intubation with the Clarus Levitan Stylet and the Cook-Gas ILA

**Case History:** 63 year male height 5’9 weight 263 lbs. presented for right total knee replacement under general anesthesia. Preoperative intravenous line insertion was unsuccessful after three attempts, despite the best efforts of the anesthesiologist and preoperative holding area nurse. Our patient was brought to the operating, monitors applied, arms positioned on boards with pressure points padded and arms secured, then given an inhalation induction with 8 lpm Nitrous Oxide, 4 lpm Oxygen and 8% Sevoflurane. Following loss of protective airway reflexes, a Cook-Gas 4.5 ILA was introduced into patient’s pharynx without difficulty in one attempt. Spontaneous ventilation returned with the placement of the ILA, and the patient was permitted to continue spontaneous ventilation until after the surgical incision. Vascular access was established with a central venous catheter placed in the right internal jugular vein utilizing ultrasound guidance (Site Rite 3).

The anesthesiologist elected to control the patient’s ventilation due to the patient’s large abdominal and thoracic girth so as to better oxygenate and ventilate the patient. To prepare for the intubation, the Anesthesiologist cut an 8.0 Mallinckrodt Intermediate Hi-Lo Enotracheal tube to 30 cm total length, set 15 mm connector aside, then lubricated the interior of the ETT and ILA with silicone endoscopic lubricant. A 160 mg lidocaine LTA was administered through the ILA prior to endoscopy. Initial exam with the Levitan Stylet exposed larynx without difficulty through the ILA while spontaneous ventilation continued. The ETT/Levitan Stylet complex was placed through the vocal cords without resistance (tracheal rings visualized) and ETT slid off the Levitan stylet, then stylet withdrawn. The patient was successfully ventilated with the ETT (positive return of EtCO2) and was secured in place within the ILA.

At the end of the procedure, the ILA/ETT combination was removed from the patient’s mouth together following emergence from general anesthesia.