ADL News

Volume 1, Issue 1 USAF Area Dental Laboratory System - 17 March 2004

Comments from the Director

Congratulations to the men and women of the Peterson ADL for putting together another outstanding annual Workshop this year! This event is the largest of its kind in the Air Force Dental Corps, and takes a tremendous amount of time and energy to plan and execute. Everyone in the ADL is involved in its execution in one form or another. This year's forum was held in downtown Colorado Springs, conveniently located to many shopping and eating facilities. Kudos to those of you who challenged the Certified Dental Technician examination given in conjunction with the workshop - best of luck in your pursuit of excellence! Approximately 357 attendees participated in 13 "hands-on" practical courses, 24 hours of didactic courses for laboratory technicians, and 24 hours of didactic courses for dentists.

Every effort is made in developing a quality continuing education forum for all attendees. None of which would be possible without the participation of the outstanding speakers who volunteered their time to put together a quality presentation for you.

This ADL information letter begins a new format of letters entitled "*ADLNews*". As outlined in AFI 47-101, ADLs publish information letters addressing technical data and management information for supported base laboratories. Previously, all Air Force ADLs generated their own letter, however, effective with this edition, all ADLs will combine their resources to accomplish this task. This will allow the ADL officers to work more efficiently, and at the same time, continue publishing a quality letter to help all dental laboratories and dentists to work more efficiently.

For the last seven months, the Peterson ADL has been testing and perfecting a new production management program that predicts laboratory technician production. This program, entitled "Dynamic Delivery Dates" (D^3) by its developer, Mr. Donald Meaney, establishes your case delivery date to your facility (mail time is included). Once a case is received here at the ADL and is accepted by our quality control system, the D^3 date is assigned to the case and posted on our website. This allows providers to schedule their patient well in advance of receiving the casework. It is an exciting program, and has significant patient management/scheduling benefits for our customers. Every effort will be made to ensure these delivery dates are met, so please take advantage of this new service!

Since the Peterson ADL has added TAP appliances to the list of services, I have had a number of consultations with dentists in the field concerning the clinical requirements for the process. A PowerPoint presentation concerning TAP appliances was developed by Col Knudson and Maj Guillory at Lackland, but was somewhat difficult for audiences to follow. Therefore, the presentation was reworked by the authors and is printed in this issue. I have also attached the newest Porcelain Design Option form to this letter. Thank you for your continued use of the ADL system - we are here to support you!

//signed//

RANDALL C. DUNCAN, COL, USAF, DC
Peterson Area Dental Laboratory Director

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Dynamic Delivery Dates (D^3)

by Mr. Donald Meaney, CDT

The Peterson ADL is venturing into a new service arena that is designed to enhance your patient scheduling and delivery of dental care. The ADL is posting predicted *Delivery Dates* on our web page that identifies when your case will be completed and returned to your dental treatment facility. The use of this information is intended to allow you to schedule your patients, well in advance of the appointment with a high level of confidence.

Web Page Access

You can access our website to check the posted delivery date after your case clears our preliminary quality control process and is entered into the commercial software program. At the ADLs home page, click on "Dynamic Delivery Date", and then the folder titled, "Report" (Fig. 1).

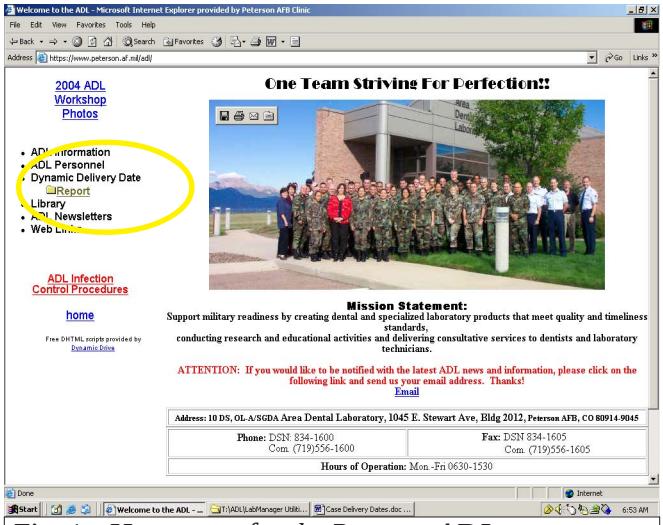


Fig. 1. Home page for the Peterson ADL

When in the "Report" window (Fig. 2), select the "In-House" tab at the bottom of the screen, then use the scroll down bar on the right to view your case submission. Our current workload is sorted by submitting base. On the far right of the report, at the 5th column, you will see the *Delivery Date* for your case. The posted *Delivery Date* is our best estimate of when the case will be returned to your clinic completed. You can use that date as your initial starting point for patient scheduling purposes and have your assistant or other representative call the patient to confirm the convenience of an appointment made

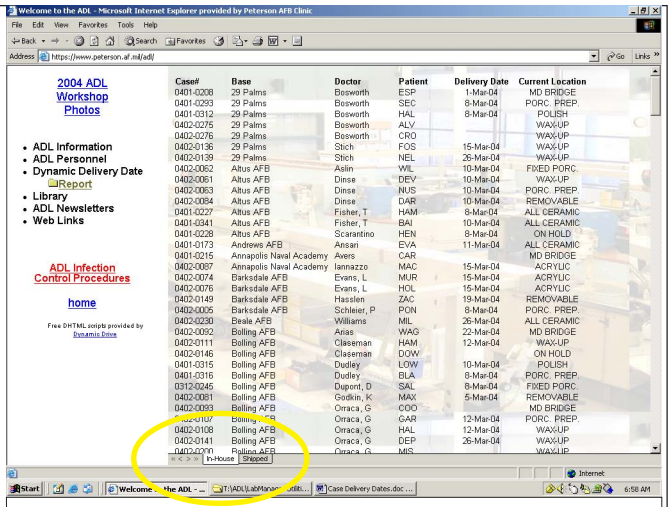


Fig. 2. Case Status Report

after the delivery date.

These estimated delivery dates will be posted within a matter of days after you have shipped your case to the ADL, and these dates are available to you well in advance of the case's subsequent return to your facility.

Our Production Accountability System and You

As a case progresses through the manufacturing process, each case is computer monitored as to location and age, and has a series of automated timeliness checkpoints that are viewed daily by section. If a case is falling off schedule, the NCOIC or Team Leader will see a "Check Status" or "Call" notation and corrective action can be applied. In the event the case is at risk of not meeting the target *Ship-by-Date* and our later promised *Delivery Date*, we will contact you (up to 5 days in advance) to explain the issue. It is our goal to have this event occur less then 5% of the time, for all casework in the ADL.

On-Hold Cases

If you see the "On-Hold" notation attached to your case, it signifies the case has one or more reasons why we cannot proceed. For example, a cast is missing, or a shade specification is absent. The "On-Hold" notation also implies that we have attempted to contact you without success, or are waiting on a follow-up submission from you. If you have any questions, you are welcome to call DSN: 834-1608 or 1606.

FedEx

The Peterson ADL uses one-day, FedEx services for shipping your completed casework back to you. To expedite your casework submissions, we

recommend FedEx or an equally reliable service. D^3 is reserved for CONUS Dental Treatment Facilities, as we are uncertain of shipping timelines outside of the Continental United States. Even so, the *Delivery Date* can be used by overseas locations as a tentative completion time, with the variable of overseas shipping times remaining unknown.

Expedited Care and D^3

Cases requiring expedited handling, based on mission related factors, need a statement clearly placed on the DD Form 2322 informing the ADL of the need. We will act accordingly to accommodate your patient's mission timelines.

How is D^3 Generated?

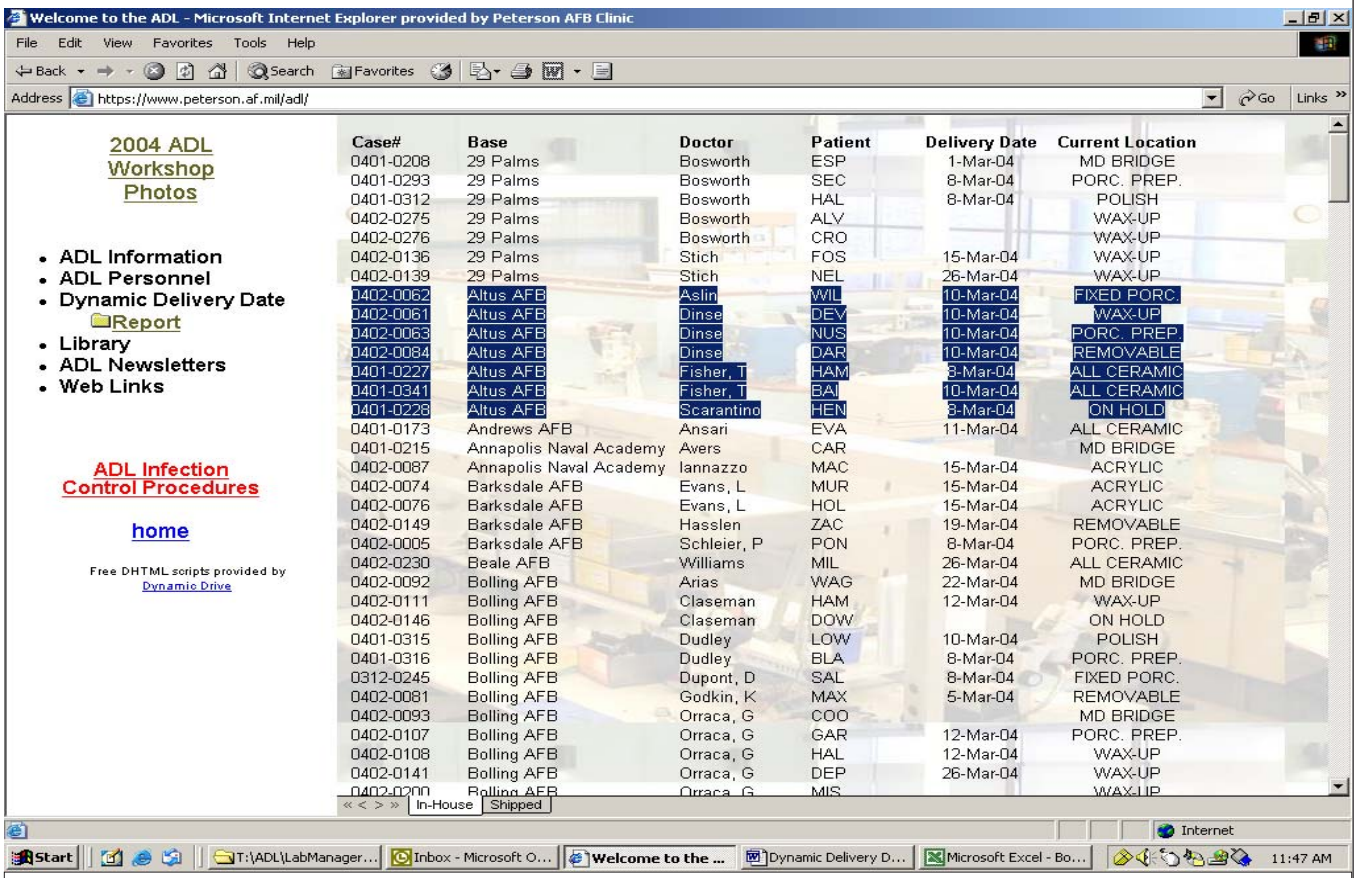
Without elaborating upon the mathematics supporting the D^3 prediction, it is a *forward-looking* application, independent of the LabManager program. The application takes into account the variable case workload in each section, department and product line, the proficiency levels and utilization of the assigned staff and calculates the production cycle times which includes weekends, federal holidays, shipping times and other anticipated squadron events. The suggested *Delivery Date* for individual cases is then forwarded to the responsible NCOIC to approve or modify. The selected date becomes our operational performance goal-to serve you the provider.

Printing a Base Specific Roster

You can print a base specific roster of ADL *In-House* casework and *Delivery Dates* by completing the following instructions. With your cursor, highlight the desired data (Fig. 3), copy the highlighted data, then open a new Microsoft Excel worksheet from your Start button. Paste the data into Microsoft Excel, and then delete the data base rows and columns not necessary for your needs. Print and distribute to your end users for scheduling purposes.

Past Performance Beta Test

Our performance has been very encouraging for such a new initiative and the staff learning curve required. We began testing in August 2003. With respect to our principle product line, which includes porcelain fused to metal crowns, fixed partial dentures, full gold crowns, and implant retained fixed



Case#	Base	Doctor	Patient	Delivery Date	Current Location
0401-0208	29 Palms	Bosworth	ESP	1-Mar-04	MD BRIDGE
0401-0293	29 Palms	Bosworth	SEC	8-Mar-04	PORC. PREP.
0401-0312	29 Palms	Bosworth	HAL	8-Mar-04	POLISH
0402-0275	29 Palms	Bosworth	ALV		WAX-UP
0402-0276	29 Palms	Bosworth	CRO		WAX-UP
0402-0136	29 Palms	Stich	FOS	15-Mar-04	WAX-UP
0402-0139	29 Palms	Stich	NEL	26-Mar-04	WAX-UP
0402-0062	Altus AFB	Aslin	WIL	10-Mar-04	FIXED PORC.
0402-0061	Altus AFB	Dinse	DEV	10-Mar-04	WAX-UP
0402-0063	Altus AFB	Dinse	NUS	10-Mar-04	PORC. PREP.
0402-0084	Altus AFB	Dinse	DAR	10-Mar-04	REMOVABLE
0401-0227	Altus AFB	Fisher, T	HAM	8-Mar-04	ALL CERAMIC
0401-0341	Altus AFB	Fisher, T	BAI	10-Mar-04	ALL CERAMIC
0401-0228	Altus AFB	Scarantino	HEN	8-Mar-04	ON HOLD
0401-0173	Andrews AFB	Ansari	EVA	11-Mar-04	ALL CERAMIC
0401-0215	Annapolis Naval Academy	Avers	CAR		MD BRIDGE
0402-0087	Annapolis Naval Academy	Iannazzo	MAC	15-Mar-04	ACRYLIC
0402-0074	Barksdale AFB	Evans, L	MUR	15-Mar-04	ACRYLIC
0402-0076	Barksdale AFB	Evans, L	HOL	15-Mar-04	ACRYLIC
0402-0149	Barksdale AFB	Hasslen	ZAC	19-Mar-04	REMOVABLE
0402-0005	Barksdale AFB	Schleier, P	PON	8-Mar-04	PORC. PREP.
0402-0230	Beale AFB	Williams	MIL	26-Mar-04	ALL CERAMIC
0402-0092	Bolling AFB	Arias	WAG	22-Mar-04	MD BRIDGE
0402-0111	Bolling AFB	Claseman	HAM	12-Mar-04	WAX-UP
0402-0146	Bolling AFB	Claseman	DOW		ON HOLD
0401-0315	Bolling AFB	Dudley	LOW	10-Mar-04	POLISH
0401-0316	Bolling AFB	Dudley	BLA	8-Mar-04	PORC. PREP.
0312-0245	Bolling AFB	Dupont, D	SAL	8-Mar-04	FIXED PORC.
0402-0081	Bolling AFB	Godkin, K	MAX	5-Mar-04	REMOVABLE
0402-0093	Bolling AFB	Orraca, G	COO		MD BRIDGE
0402-0107	Bolling AFB	Orraca, G	GAR	12-Mar-04	PORC. PREP.
0402-0108	Bolling AFB	Orraca, G	HAL	12-Mar-04	WAX-UP
0402-0141	Bolling AFB	Orraca, G	DEP	26-Mar-04	WAX-UP
0402-0200	Bolling AFB	Orraca, G	MIS		WAX-UP

Fig. 3. Highlighted Portion of ADL "In-House Work Load". This can be pasted into an Excel spreadsheet and printed as a stand-alone report if you wish.

appliances, we have had a success rate of 94.0%, and have shipped 825 cases out of 878 (1,742 units) on or before our internal, *Ship-by-Date Target*, to satisfy your promised *Delivery Date*. More recent performance assessments, done in real time on a weekly basis, have shown an even higher rate of success approaching 97%.

Contact Information

Mr. Donald T. Meaney, DSN: 834-1607

Dental Laboratory Management Guide

by SMSgt Leo Chaney

The Peterson ADL created an administrative management guide for our USAF Base Dental Laboratories, which offers guidance in various areas of laboratory administration. It is produced in CD-ROM format and is available upon request to any Air Force dental laboratory or laboratory officer. This guide utilizes many sources, including AFIs, the AF Dental Management Guide, locally produced letters and forms, and personal experience. This guide is not intended to be all-inclusive; it is intended to be used as a reference in managing the Base Dental Laboratory. If you would like a copy of this guide, please call or e-mail SMSgt Leo Chaney at DSN 834-1621, leo.chaney@peterson.af.mil

Purchasing Precious Metal s & Alloys

by Trisha Murphy, GS-8

The process of making precious metals purchases is a constant, ongoing task made every week. I compare the price of alloys in the Depot, and from two commercial companies, Wieland Dental and Metalor Technologies USA. Alloy prices change constantly, which can make a significant difference in the price of your total alloy purchase.

As of 25 Feb 04 the price for V-Delta SF was $350.17 an ounce and the price for Portadur P2 was $361.00 an ounce. Based on current market price and our consumption, we chose to purchase our alloys from the Depot at this time, but the Depot does not always offer the best price.

Firmilay II Type III Alloy

In Spring/Summer 2002, due to the cost of Type III alloy for the Depot, we changed our Type III alloy from Firmilay (Depot) to Portadur P2 (Wieland Dental Systems). We purchased Portadur P2, part number 012013, from Wieland for $291.84 an ounce. Compared to the price for Firmilay II from the Depot, at $372.10 an ounce, and useing 138.4 ounces, we saved the Air Force $11,107.98. Wieland Dental has a Blanket Purchase Agreement with the Air Force, which will enable you to purchase over $2,500 from them on one purchase, if the price drops below the Depot price. They may be contacted at 866-876-0885, or their web site:

http://www.wieland-dental.com

Olympia

We also changed the source for our metal-ceramic alloy from Olympia (Depot) to V-Delta® SF (Metalor® Technologies USA, part number PTDE02631). The price for V-Delta® SF is $328.80 an ounce, compared to Olympia at $475 an ounce. This saved the Air Force $34,971.04 last FY by switching to this metal alone.

Metalor Technologies, USA also has a Blanket Purchase Agreement with the Air Force. They may be contacted at 800-554-5504, or their web site:

http://www.metalor.ch

Currently, Depot prices are cheaper than Metalor, so there is no advantage to purchasing from one source over the other, however, that could quickly change in a volatile market. The bottom line is, research the market before you buy! You could save your DTF a considerable amount of money.

FedEx Mailing Services for CONUS Dental Laboratories

by SMSgt Nancy Kujak

After comparing FedEx services to United States Postal Service (USPS), FedEx is far more advantageous for about the same price. Some of the main advantages of FedEx are: offers a guaranteed overnight delivery to the majority of location, provides a guaranteed online tracking system, contributes to reducing access to care rates by allowing one day shipping time, offers free pick up and delivery services and they provide training and supplies. Finally, the price for a 1 to 2 lb. package is around $3.47 - $5.00, which is roughly

the same as USPS.

The process to set up or get added to your medical group, base or wing account vary by location, but here is how the Peterson Area Dental Laboratory acquired services. We talked with the Logistics Section and then with the Resource Management Office within the medical group. They already had FedEx accounts set up and we were added to the existing contract. You may want to begin by talking with the medical laboratory to see if they have an existing account. Since the ADL is so large and uses over $17,000 in FedEx services annually, we had to complete an AF Form 616, Fund Cite Authorization (FCA). We filled out this form and worked with the base Transportation Office to complete the process. Once again, the coordination process for the AF Form 616 is different for each installation, so work closely with logistics and the base transportation office to complete the process.

We changed services from the USPS for a variety of reasons, but our main concern was the excessive shipping times. We completed a two-month study and found the shipping time varied anywhere from 4 - 20 days. Although USPS advertises a 2-3 day delivery, it is neither guaranteed and there is no way to track packages. We found the price for a 1 to 2 lb. package at priority rate was around $3.85 - $4.50, which comparable to FedEx rates. If you require any further information the USAF Academy POC for the ADL's FedEx account is Mrs. Diane Krider and if you have any general questions, she can be contacted at DSN 333-2904 or commercial 719-333-2904.

Top Technician of the Air Force

Col. Randall Duncan, CMSgt Dan Elfring, SMSgt Leo Chaney and TSgt Sidney Dwyer

The first *Top Technician of the Air Force* contest was held this year, with the award winners being recognized during the annual Peterson ADL Workshop. There were two categories of entry for this contest: a 3-5 Skill level category, which included the manufacturing of one single unit PFM crown and a single unit full gold crown, and a 5-7 Skill level category, which included the manufacturing of a 3 unit anterior fixed partial denture. Participants finished the cases in their laboratory and mailed them to the Peterson ADL for judging, using objective scoring criteria. The winners truly excelled in demonstating their superb technical abilities during this contest, and it was indeed a pleasure as well as a challenge to judge the participants. The winner of the 3-5 skill-level category was SSgt Luis Gallegos, Travis AFB, and the winner of the 7-9 skill-level category was TSgt Jose Reyes, Luke AFB. Congratulations to the winners of these events!

Fig. 21. First annual Dental Laboratory Technicians of the Year: (a) MSgt Renee Munar accepting on behalf of SSgt Luis Gallegos (Travis AFB), winner of the 3-5 Skill Level Category (b) TSgt Jose Reyes (Luke AFB) winner of the 7-9 Skill Level Category.

Kudos to TSgt Sidney Dwyer of the Peterson ADL for all of his efforts in creating and managing this contest! We have already begun planning for next years workshop, possibly at a resort here in the Springs, and we plan on having this contest again next year, so get ready.

Fabrication of Obstructive Sleep Apnea Devices

Col. Rodney C. Knudson and Maj. Villa L. Guillory

Obstructive Sleep Apnea (OSA) is a common, potentially life threatening sleep disorder characterized by obstruction of the upper airway with persistent ventilatory effort. Obstruction may last on average 20 to 60 seconds and number several hundred episodes per night causing significant cardiopulmonary changes and oxygen desaturation. The most common complaints of an OSA patient are hypersomnolence, snoring, disturbed sleep and frequent arousals. Other symptoms include morning headaches, intellectual deterioration, anxiety, depression, nocturnal enuresis and impotence. The patient can develop hypercarbia, hypoxemia, hypertension, polycythemia, heart failure and cardiac arrhythmias.

Treatment of OSA patients at WHMC dates back to 1986. Early devices were fabricated on 0° blocked-out duplicated casts, waxed, flasked, boiled-out, packed and processed using heat cured PMMA resin. Fitting at the time of insertion and postoperative protrusive adjustments were time consuming since the maxillary and mandibular segments were joined together in a fixed position. As the number of patients referred for oral devices increased, other methods of fabrication using 2.0 mm Biocryl (Great Lakes Orthodontics) splint material were utilized to decrease both laboratory and clinic time.

Recently, we have introduced the Thornton Adjustable Positioner (TAP) device as part of the prosthodontic residency program. The TAP device offers several advantages over the fixed devices. The technique requires alginate impressions for casts; no protrusive record is made since casts are not mounted. The TAP device can be easily adjusted in small increments by the patient each night. The device restricts retrusive movement while still allowing some lateral, vertical, and protrusive movements.

The following instructions outline two techniques (fixed and adjustable) for fabrication of an obstructive sleep apnea device for a dentate patient. The intraoral device is a noninvasive, reversible treatment that prevents or minimizes the collapse of the tongue against the pharyngeal walls by positioning the mandible in an opened vertical, protrusive position.

Instructions For A Fixed Device:

1. Obtain accurate casts using irreversible hydrocolloid impression material. An interocclusal record is made with the mandible in a protrusive end-to-end incisal relationship (or approximately 75% maximum protrusion), opened vertically 10-14mm.

Fig. 4. Make alginate impressions to obtain max/man casts and block-out deep interproximal/cervical undercuts using LC Block-Out Resin by Ultradent (Do Not Use Wax). Drill holes thru base of casts in the palatal / lingual vestibular areas for better material adaptation.

2. Block out excessive hard and soft tissue undercuts with a resin block-out material and duplicate casts (Fig. 4).
3. Mount master casts using the interocclusal record in a semi-adjustable articulator. Duplicate casts can be cross-mounted.
4. Using 2.0 mm Biocryl splint material, vacuum form splints on maxillary and mandibular duplicate or master casts.
5. Using a separating disk or Robinson's hard bristle brush, cut splints to the desired shape leaving approximately 3 mm splint material on the buccal and labial tooth surfaces and 6 to 10 mm on the palatal or lingual soft tissues. The edges should be rounded and polished.
6. Splints are repositioned on mounted casts. Posterior occlusal surfaces of splints are roughened; Visible Light Cured (VLC) bonding agent (Triad gel, Dentsply) is applied and clear VLC sheet resin is used to build posterior rims. Divide intermaxillary space

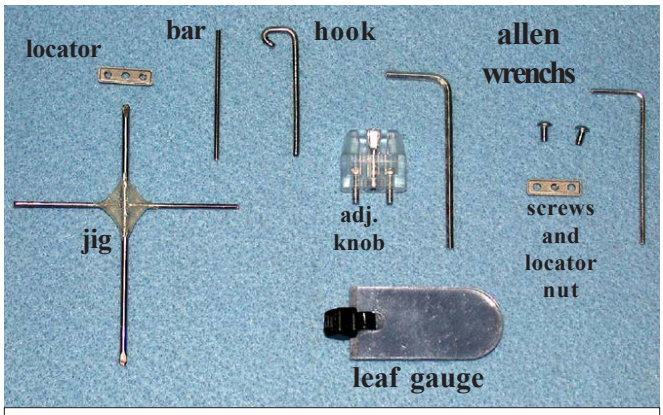


Fig. 5. Armamentaria (left to right): locator (semi-lunar hole), jig for positioning locator, bar, hook, adjustment knob with screws, 5/64" allen wrench to attach knob to locator, leaf gauge, screws and locator nut, and .050 allen wrench to attach locator nut to locator.

between maxillary and mandibular splints and leave a 1 to 2 mm separation to facilitate the joining of the two segments.

7. Fit and adjust each splint. Clear VLC gel

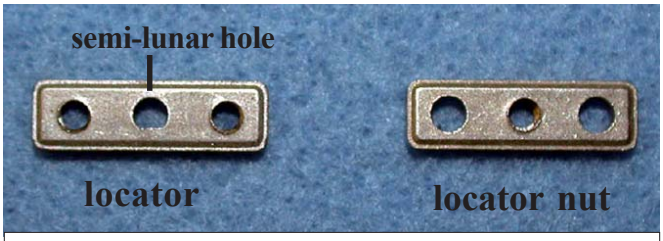


Fig. 6. Close-up view of locator and locator nut.

can be used to "spot" join the splints on the articulator. After the treatment position has been established, the segments can be permanently attached with clear VLC sheet resin and veneered with a clear gel.

Instructions for an Adjustable Device: the TAP Appliance

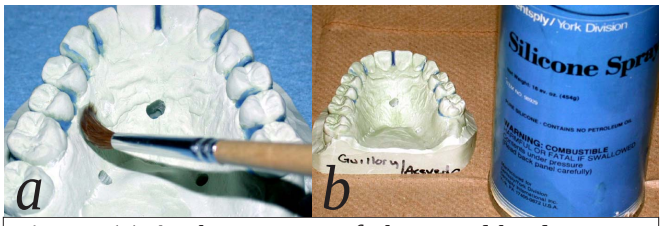


Fig. 7. (a) Apply two coats of alcote and let dry. (b) Apply silicone spray 30 seconds before the heating cycle of Durasoft® (first layer) is completed.

1. Alginate impressions for casts (recommend duplicating casts).
2. Blockout deep interproximal and cervical undercuts using VLC block-out resin (Ultradent) (Fig. 4).

Fig. 8. Pressure form Durasoft® material on casts using Biostar or Ministar code 223 (40 seconds on the hard side first then invert and do 40 seconds on soft side or until tiny bubbles appear in the material).

Fig. 9. Open holes through the Durasoft (first layer) for better adaptation of 2mm Biocryl splint material (second layer).

3. Drill several holes through base of casts for better adaptation of layered material.
4. Apply 2 coats of Alcote.
5. First Layer: Pressure-form Durasoft® material (bilaminate material = .8 mm hard and 1.0 mm soft) utilizing Biostar machine on casts (Biostar or Ministar code 223; 40 sec on hard-sided surface, then invert and do 40 sec on soft side).
6. Re-drill holes through the Durasoft® material (Fig. 9).
7. Max Cast: Position locator (plate with semi

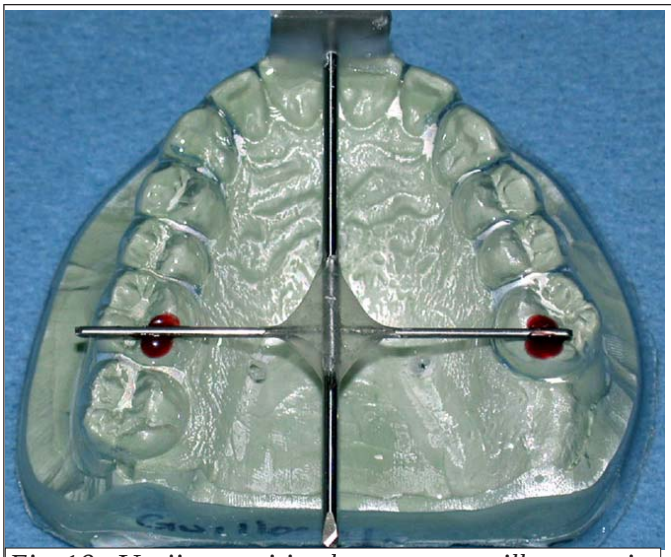


Fig. 10. Use jig to position locator on maxillary cast in midline. Sticky wax locator to the tip of jig; the flat side of semi lunar hole faces coronal. Secure locator with clear autopolymerizing PMMA resin.

lunar hole) on maxillary dental and palatal midline utilizing jig (Fig. 10). Locator is sticky-waxed to the tip of the jig. Note: Flat side of semi lunar hole faces coronal. Secure plate to first laminate layer with clear autopolymerizing PMMA resin. Remove jig, cut excess resin and flatten anterior surface of locator plate (Fig. 11).

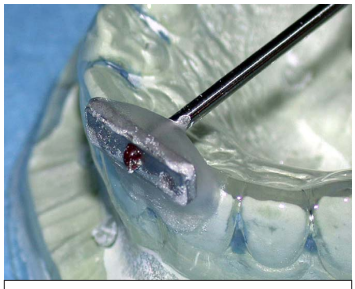


Fig. 11. Flatten resin on the anterior surface of locator.

8. Man Cast: Soften thermacryl beads in water

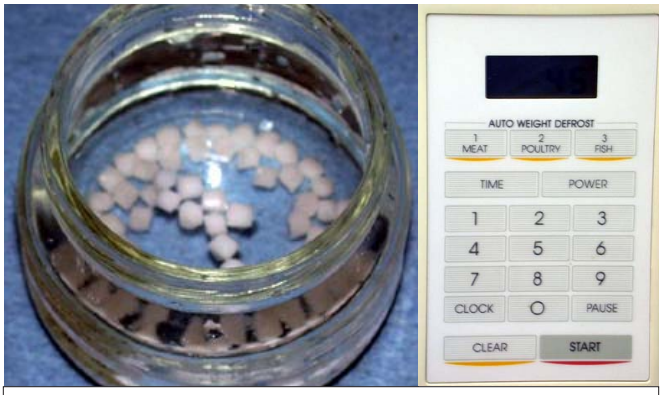


Fig. 12. Place ThermAcryl™ in a small jar with water and heat in microwave for 45-60 seconds (until material is clear). Note: material will be very hot.

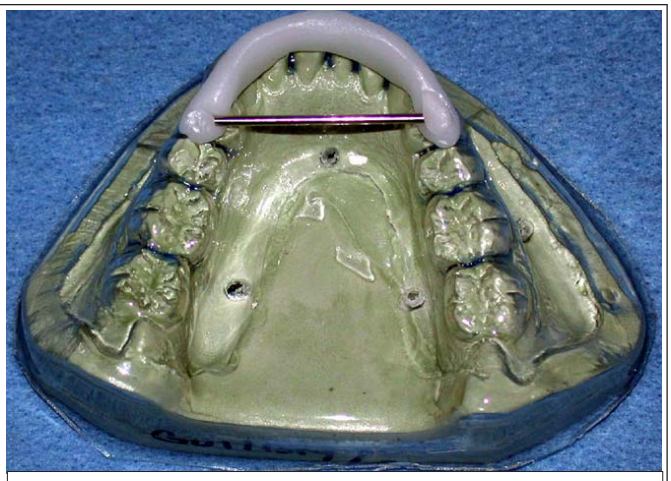


Fig. 13. Adapt ThermAcryl™ to the incisal edges from 1st bicuspid to 1st bicuspid (approximately 2-3 mm in height and width) and incorporate bar perpendicular to a line bisecting the posterior teeth.

for 45 sec in microwave (Fig. 12). Adapt to man cast incisal edges from 1st bicuspid to 1st bicuspid and

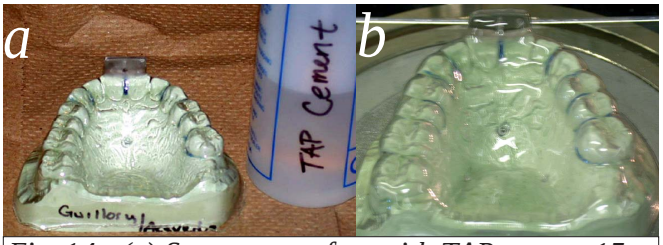


Fig. 14. (a) Spray cast surface with TAP cement 15 – 30 seconds before the end of the heating cycle of the Biocryl splint material. (b) Biocryl splint material adapted to the cast.

incorporate crossbar at this bicuspid position. Note: If the patient has a class II malocclusion, move the bar anteriorly and do the reverse for Class III patients (Fig. 13).

9. Second Layer: Use 2 mm Biocryl splint material

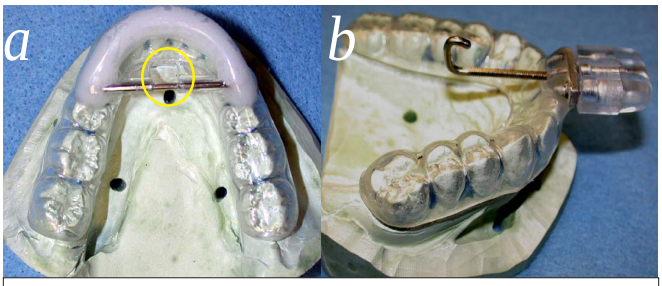


Fig. 15. (a) Cut a 3-4 mm opening anteriorly from the bar to allow hook engagement. (b) Drill holes through the splint material to insert the hook and adjustment knob assembly.

(Great Lakes Orthodontics) for the second layer. Heat at Biostar code 183 (small bubbles will appear when splint material is ready). Spray TAP cement (weld-on

Fig. 16. (a) TAP devices completely trimmed and finished, ready for delivery appointment. (b) TAP devices positioned to simulate intraoral positioning: hook is engaged with bar to provide anteroposterior adjustment of mandibular position.

#4 acrylic cement, IPS Corp, Gardena, CA) 30 sec before the end of the heating cycle before completing the adaptation under the vent hood. Remove splint material from cast and trim approximately 1 mm beyond the free gingival margin. Smooth edges with felt wheel.

10. For the mandibular cast, cut open a 3-4 mm slot across the bar corresponding to the hook (Fig. 15a). For the maxillary cast, drill through the second laminate material to insert the hook and adjustment knob assembly (Fig 15b).

Fig. 17. Devices are tried-in clinicaalt to evaluate fit. Place into a water bath at 200^0 F to modify retention of device.

11. Remove appliance from casts and trim approximately 1 mm beyond the free gingival margin. Smooth edges with a felt wheel.

Delivery of TAP Devices

Try in each segment and evaluate fit. If either of the devices are too tight, heat them in hot water (200^0) for 30 seconds (Fig. 17). Then place the device in the patient's mouth and remove several times while

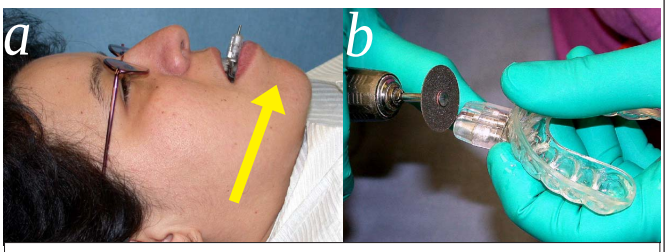


Fig. 18. (a) Dial the adjustment knob clockwise to the patient's MMP. (b) Removal of the threads protruded from the adjustment knob. Shoul be cut flush with the knob and polished.

cooling. If the device is still too tight, repeat the process, and if necessary, trim the flanges. If either device is not tight enough, heat the posterior area one side at a time in 200^0 F water for 30 seconds. Remove and press the flanges together slightly with your fingers and hold the device as it cools.

Dial the adjustment knob clockwise to the patient's maximum mechanical protrusion (MMP), as shown in Fig. 18a. The patient will feel some discomfort at this position. When the hook is dialed forward, part of the hook threads will protrude from the front of the adjustment knob. Cut the protruded

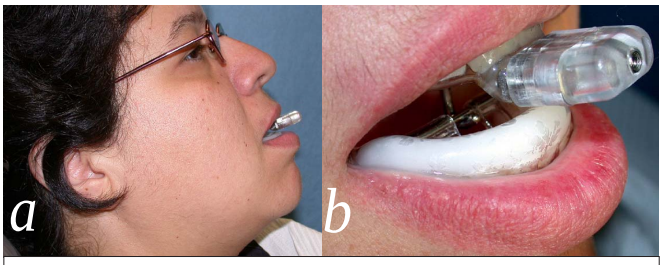


Fig. 19. (a) Mandible is positioned as far forward as is comfortable, the Maximum Comfortable Position. (b) Instruct the patient to continue to dial the hook forward one turn (180^0) per night until symptoms are alleviated.

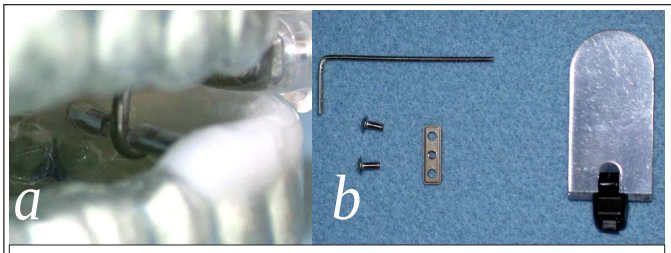


Fig. 20. (a) If the ThermAcryl height is excessive or if the bar is positioned too low, this may cause interference with the adjustment knob as the mandible is protruded. (b) Once the treatment position is established, the adjustment knob is removed and the locator nut set attached. A leaf gauge is used to help the patient turn to their normal occlusion.

threads (Fig. 18b) flush with the front of adjustment knob and polish the end. Dial the hook back (counterclockwise) in increments of five until the patient can hook and unhook the device. Note: The starting position should be approximately 25 turns back from MMP. From the starting position, turn knob clockwise while the patient is in upright position. When the patient's mandible is dialed as far forward as is comfortable, he/she has reached the maximum comfortable position (MCP), also called the initial treatment position (Fig. 19a). Instruct the patient to continue to dial the hook forward one turn (180^0) per night until symptoms are alleviated. If any position becomes uncomfortable, dial the hook back until the pain subsides. Once the treatment position is established, the adjustment knob can be removed and the locator nut set attached (Fig. 20a-b). When the jaw is pulled forward during the night, it may make the jaw muscles sore and temporarily change the occlusion. The leaf gauge is used to help the patient turn to their normal occlusion.

Graduate Assessment Survey

The Graduate Assessment Survey (GAS) is a tool to provide crucial feedback information from the gaining bases to the Dental Laboratory Apprentice Course. The GAS is an e-mailed survey sent from the technical training school through the base training managers to the group-training managers, who then forward it to the immediate supervisors of all recent 3-level course graduates. Upon receipt, supervisors should immediately complete the survey. This provides the Schoolhouse feedback on the effectiveness of training in meeting established requirements.

The key to proper GAS survey completion requires an understanding of the survey and the Career Field Education and Training Plan (CFETP). Question one, gives the Military Training Leaders (the "supervisors" in the medical training dormitory) feedback on the graduate's adherence to military standards upon arrival at their permanent base. Military bearing is addressed here along with problems concerning attitude, behavior and motivation.

Question two, provides the dental laboratory course personnel feedback on how well the graduate was trained in accordance with the proficiency training code requirements in column 3A (the 3-level course column) of the Specialty Training Standard (STS) in the CFETP (i.e., did the individual receive adequate training to the required level). Respondents to this question should have a thorough knowledge of the STS in the CFETP. Question two, also needs to be considered upon arrival to be an accurate measure of the training course's success.

Question three, addresses the CFETP and if it meets the training needs of the specific work center. If the current STS training level is inadequate to meet local needs (i.e., the breadth and depth of task knowledge and experience), make specific comments for improvement under this question. This information will allow the Career Field Manager to determine if a Utilization and Training Workshop is required to facilitate a change in the current CFETP/STS training levels.

This feedback is essential to the schoolhouse and this is the main tool they utilize to improve their curiculum and training program. If supervisors are not getting these electronic surveys, laboratory NCOICs need to find out who they are being sent to at your base. A GAS should normally be received 3 - 4 months after your graduates arrive at your base.

Chief's Comments

I hope that those of you who were able to attend this year's workshop enjoyed the program. If not, we'd love to hear how we could make future ones more valuable. I was disappointed in the number of surveys we received, so we only have verbal comments to go

by. While I'm on the survey bandwagon, I would greatly appreciate if the Lab NCOIC's took an active role in asking the providers to complete our lab case QC forms and then return them to us in a timely manner. Our return rate is too shocking to even print, so please help us in this area. For those of you who weren't able to attend, I hope to see you next year. We have already started to look for another exciting time and place to hold the conference. Did I mention it would be nice to get your input on this workshop we host just for you?

I would like to highlight two new services we provide. We now have the capability to make Valplast appliances. This is an exciting product we now have. There are many indications for this flexible partial denture. The other new product is the Thornton Adjustable Positioner (TAP) appliance. There is an article in this newsletter on it. I would encourage the lab NCOIC's to ensure their dental providers know that we offer these new services and where they are indicated. We want to ensure that patients get the best possible appliance for the indication, and these two new services are the best course of treatment for many patients.

Our website is constantly being updated to hopefully meet your needs. We are trying to make it informative and functional. If you have a suggestion for ways to better utilize our website, please let me know. It will be especially useful for patient insertion dates by accessing our Dynamic Delivery Date. This date is when you will have it back in your clinic. You will be able to schedule the patient for their insertion date a couple days after we receive it here at the ADL.

I wanted to brief this topic at the workshop but we ran out of time. The Air Force has contracted with a company called SkillSoft to give you FREE on-line courses. The list of courses is almost endless, from computer software, how to delegate, personnel and time management and on and on. This is a great resource for those who don't have time or money to take college courses but can further their personal development for quarterly and annual awards packages. Plus, as a supervisor, if you see someone struggling with a problem area, you can direct them to this site for a course on that particular topic. Most courses take about 2 hours and the website can be accessed from home or at work. When you complete a course, you can print out a nice certificate to line your walls in your office or lab. The website is www.smartforce.com. You will need to create an account and password as a new user. If anyone wants more information on the courses or how to access them, contact Mr. Don Meaney at the Peterson ADL, he has completed over 25 of these courses. This contract ends next year so take advantage of it while you can.

I would ask the Lab NCOIC's to read the latest Morbidity and Mortality Weekly Report (MMWR) article from the Center for Disease Control (CDC) website, it references silicosis in the dental laboratory. It is located at http://www.cdc.gov and is also posted on the Peterson ADL website. The title of the article is "Silicosis in Dental Laboratory Technicians --- Five States, 1994--2000". We also posted another article concerning the preventative measures that dental laboratories can take to prevent this disease from the New Jersey Department of Health & Senior Services. The bioenvironmental engineering personnel at your base already ensure that your laboratory is in compliance with all the published standards and precautions, however, it never hurts to reinforce the use of proper PPE!

I don't know if everyone saw the message about proper coding for mouthguards, but if you fabricate a boil and bite mouthguard, the proper code is 9100. Only custom mouthguards qualify for the code 9941. Please use your integrity when coding your workload.

Most of you have heard that the Dental Corps is moving toward Dental Care Optimization (DCO). We too have a responsibility to optimize where possible. The Dental Ops Panel has chartered a Dental Lab IPT to look at the most cost effective way to deliver quality, timely dental lab support. If you have ideas on how to optimize either base labs or ADL's, or other ways we can improve our lab system, please e-mail me your input. Remember, two heads are better than one, especially if the one is mine. I would like to afford everyone the opportunity to provide input. I will tell you we just visited a couple commercial labs in the local area and it makes you swell with pride to see the quality of work we put out in comparison to those civilian labs. I won't say there are labs that do the same high-quality work we do, but I venture to say you'll pay a premium price for their expertise also. I continue to believe we provide good value lab support. Keep up the great work!

DAN ELFRING, CMSgt, USAF
Peterson Area Dental Laboratory Manager

Hails and Farewells

HAILS:

Ms. Cheryl "CJ" Jardin, Secretary - Peterson AFB
SSgt Catherine Gsell - WPAFB
SSgt Erik Lewis - Hurlburt Field
A1C Timothy McGee - Sheppard AFB
A1C Megan Lippert - Sheppard AFB
Amn Christopher Casey - Sheppard AFB
Amn Kara Talbot - Sheppard AFB

FAREWELLS:

SSgt Belinda Moore - to Columbus AFB
SSgt Michael Anderson - to Sheppard AFB
SSgt Michael Brown - to Sheppard AFB
A1C Lilibeth Brown - to Sheppard AFB
SrA Yosuan Martinez - to McDill AFB
Lt Col Allan Linehan - retired
MSgt Pete Santaulario - retired
SSgt (sel) Nicole Pino - Anderson AFB

CONGRATULATIONS!

QUARTERLY AWARD WINNERS:

Mr. James Davis - 10 MDG Civilian of the 3rd Quarter, Category 2
MSgt Wesley Schlauch - 10 MDG NCO of the 4th Quarter
Mr. James Coleman - 10 Air Base Wing and USAFA Civilian of the 4th Quarter, Category 5

ANNUAL AWARD WINNERS

SMSgt Nancy Kujak - 10 DS SNCO of the Year and USAF Small Commands SNCO of the year
Mr. James Coleman - 10 DS Civilian of the Year, Category 5
Mr. Donald Meaney - 10 DS Civilian of the Year, Category 2

ADL SHINING STAR AWARDS:

Oct 03: SSgt Maripi Whitman
Nov 03: A1C Jessica Funke
Dec 03: SrA Joel Jalomo
Jan 04: TSgt Brad Hanenkratt
Feb 04: MSg(s) Daniel Sierra

NEW TEAM LEADERS:

Wax-up:	MSgt Olen Moore
Metal Finishing:	TSgt Mark Hancock
Porcelain:	MSgt(s) Daniel Sierra
All-Ceramics:	MSgt Robert Czupryna
Fixed Dept.:	MSgt Wesley Schlauch
Removable Dept.:	MSgt Armando Tapia

CONTACT US AT:

https://www.peterson.af.mil/adl

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Dan.Elfring@peterson.af.mil ADL Manager

Leo.Chaney@peterson.af.mil Operations Element Chief

Nancy.Kujak@peterson.af.mil Support Element Chief

//signed//

RANDALL C. DUNCAN, COL, USAF, DC
Peterson Area Dental Laboratory Director

ATTACHMENT: *Porcelain Design Option Form*

Base:_____

USAF ADL Porcelain Design Options

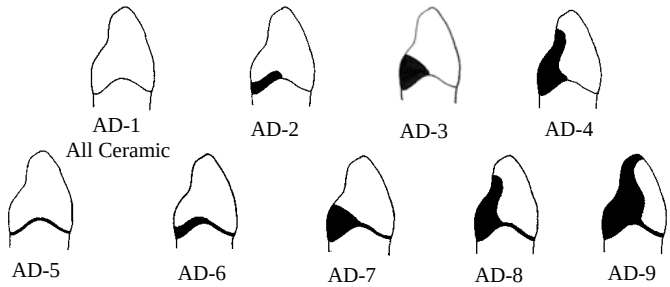
Clinician:_____

Patient:_____

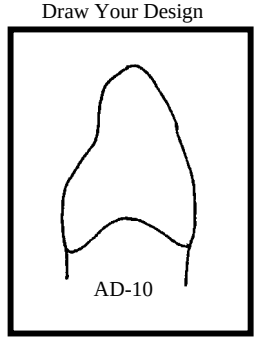
Anterior Design (AD) Options

Porcelain Margin Designs

Metal Margin Designs



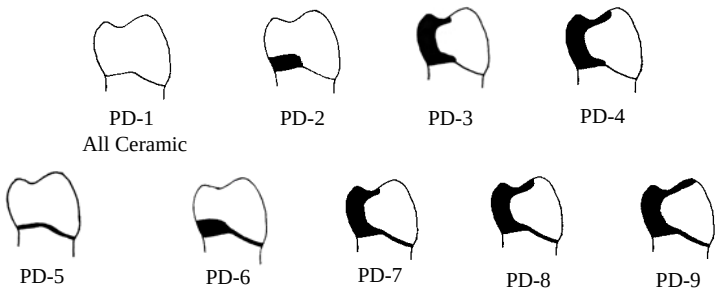
Draw Your Design



Posterior Design (PD) Options

Porcelain Margin Designs

Metal Margin Designs



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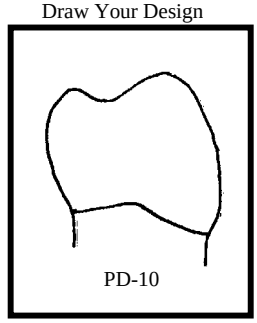

Anterior Pontic Design (APD) Options

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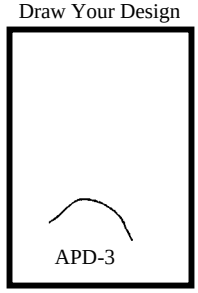
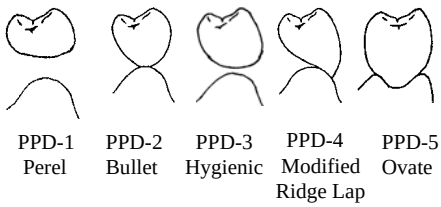
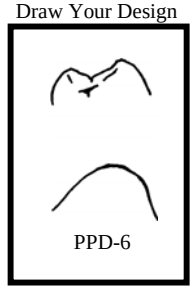


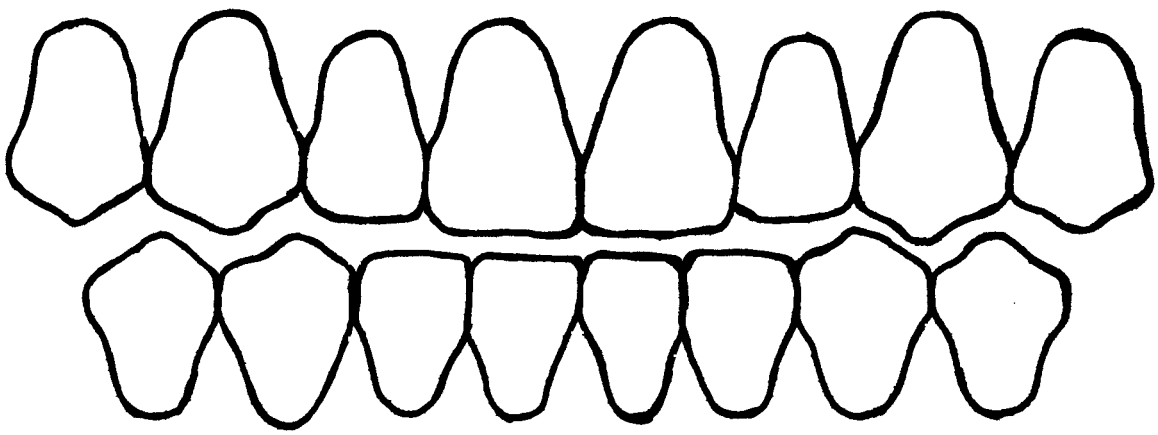
Posterior Pontic Design (PPD) Options



Draw Your Design



Characterization



POC: donald.meaney@peterson.af.mil