

**Transportation and Related Equipment Technical Advisory Committee
(TransTAC)**

March 11, 2020
U.S. Department of Commerce
Bureau of Industry and Security
Washington, DC

Open Session

TransTAC members in attendance: (Industry) Mr. Ari Novis* (TransTAC Chair), Mr. Joseph Bergeron*, Mr. Colin Donahue*, Mr. Kevin Gardner*, Ms. Corinne Kaplan*, Ms. Julie Kelly*, Mr. Rob Lawson*, Mr. Michael Osborne*, Mr. Howard Pfeifer, Mr. Ernest Tong*, and Mr. Todd Zarfos*. (* indicates attended by phone)
(Government) Ms. Patricia Muldonian (DFO).

Others present: The complete list of attendees is attached at the end of these minutes.

Opening remarks

Mr. Ari Novis called the meeting to order at 9:34 a.m. and introductions were made around the room and on the phone.

The TransTAC Fiscal Year 2020 plan was shared:

- Identify objective criteria for sensitive Emergent and Foundational technologies
- Promote the Spacecraft and UAS TWGs to address issues with existing regulatory language & emerging issues.
- Continue to review the ECCNs in Categories in 7, 8 and 9 for possible updates.
- Review in conjunction with the Materials TAC those entries in Categories 1 and 2 specific to aerospace and marine systems.
- Continue to review and provide technical advice and inputs for U.S. and foreign proposals that impact transportation and related equipment.
- Develop non-papers and proposals for updating controls for items in Categories 1, 2, 7, 8, 9 for interagency consideration for presentation at the WA Experts Group meetings.

Because the TAC is comprised of a group of competing companies, the Chair, working with the Chairs of the other TACs, has developed a policy statement in regards to both anti-trust considerations and the requirement that the TAC is not to be used for lobbying. The specific TransTAC Policy Statement was read aloud, and is entered into these minutes for the record:

Whereas

TAC activities involve cooperative undertakings and meetings among actual and potential competitors;

The TAC exists to advise and assist the Department of Commerce and other government agencies with the export regulations;

The TAC holds discussions in venues both open and closed to the public; and advice provided by the TAC can influence the regulatory conditions under which the Industry, both members and non-members, operate.

Therefore

The TAC and its members commit to upholding the highest standards of legal and ethical behavior, not only by complying strictly with all applicable laws, but also avoiding the appearance of unlawful or unethical behavior. Specifically, each member agrees that in participating in the TAC it will comply with all applicable antitrust laws.

This includes:

No sharing of communications (verbal, written, electronic, etc.) on pricing, costs, profits, detailed business strategies including product introduction, capacity, plans to bid or not bid on particular business, refusing to deal with any non-sanctioned third parties (customers, competitors, or suppliers), or any other non-public information which could or appear to provide an unfair competitive advantage to any member or group of member companies or competitors.

Not influencing the implementation, interpretation, update of existing, or creation of new regulations with the intent to unfairly advantage or disadvantage any member or group of member companies or competitors.

The purpose of the TAC is to provide unbiased Industry input to the Department of Commerce and other government agencies. Members should work to the benefit of the United States and U.S. Industry as a whole, and not uniquely to themselves or their employer.

Recent Events/List Updates

It was reported that Charles Volk from Northrop Grumman, a valued TAC member, passed away last November. He will be missed.

There haven't been any new Final Rules recently. There were the normal updates to the sanctions list. The most recent has been the change in status of the Russian Federation, being moved from Country Groups A:2 and A:4 to A:4 and D:4 and A:2, respectively, and removes Yemen from Country Group B. This then triggers a 744.3 license requirement for items going to Russia which may support rockets and missiles, which impacts the RD-180 rocket engine program. Yemen is now no longer eligible under license exception GBS.

The other change is to move items from Categories I, II, and III to the CCL, but due to ongoing court fights, means that 'published' under 734.7 has a carve-out for 3-D printed gun plans.

There was an Emerging Technology rule on Geospatial AI Imaging software added to OY521. This will trigger a WA proposal.

CCL Review – Working Group Reports

Transportation TAC (TransTAC) members described the status of the Working Groups for Categories 7-9 of the Commerce Control List (CCL), as well as efforts underway by the Composite Working Group.

The TAC has both active and inactive TWGs. The Active TWGs reported out.

Category 7

Inertials - Mr. Michael Osborne provided a status on the inertial portion of Category 7:

There are currently no active projects or proposals regarding Categories 7A001-7A003, 7A101-7A103 or related technology, software and test equipment. The TWG is supporting responses to any Category 7 WA or MTCR proposals, but has no active projects at this time.

Category 9

9.D.4 – Mr. Ari Novis provided a status on the 9.D.4 software TWG.

The purpose of the 9.D.4 TWG is to clarify the text in those entries, and to reduce or eliminate overlap of 9.D.4 with 9.D.1 and 9.D.2. Next up will be to address overlaps of 9.d.4.e with UAS controls, and 9.D.4.f & g overlap with 9.D.1.

Composite Working Group

Mr. Ari Novis provided a status on the Composite working group (CWG) activities.

The Materials TAC is merging with the Materials Processing Equipment TAC to form the Materials & Equipment TAC (METAC). The first meeting was to be in November of last year, and it's not clear if that meeting was held. The TransTAC will re-engage with the new METAC when it reconstitutes to address various items that overlap the two TACs.

UAS Working Group

Mr. Ari Novis discussed the progress of the UAS TWG.

Awaiting response from the USG on the latest meetings. The discussion revolves around moving some items from Category I to Category II, and devices which can quickly and easily be installed in an aircraft to make it optionally piloted, or 'ordinary' UAVs that have ITAR cameras installed.

The TAC is supporting various anti-UAV Wassenaar Proposals.

MT Control TWG

Mr. Ari Novis discussed the progress of the Missile Technology (MT) TWG.

The TWG remains open to support ongoing MT issues, and to work on a clarification of the scope of 9E101 (3.E.1). There may be some synergy with the Supersonic TWG, as one goal of the Supersonic TWG is to redefine the scope of 9.E.1 and 9.E.2 in relation to the scope of 'engine' technology. This may help with defining the scope of 9E101.

Spacecraft TWG

Mr. Ari Novis discussed the progress of the Spacecraft TWG.

The TWG has provided input to Wassenaar Proposals on launch vehicles and satellites. Ms. Corrine Kaplan has assumed the Chair of this TWG. The kickoff meeting was held on March 10.

Compressor TWG

Mr. Ari Novis discussed the progress of the Compressor TWG.

The Compressor TWG meetings started in January 2016. The objective is to determine if a need exists for controls on Gas Turbine Engine compressor technology. There have been a number of TWG telecons in 2019 on the subject. A 2020 Wassenaar Proposal was submitted to the WA, drafted with significant support from DoD. The TWG stands by to support that proposal.

IGT TWG

Mr. Ari Novis discussed the progress of the IGT TWG.

The objective of the TWG is to review 9.E.3.a and 9.E.3.h for possible limited de-control of Industrial Gas Turbine (IGT) specific technologies. IGTs are operated differently from aero gas turbine engines, and the market is inherently different. The control laws for aero gas turbine engines are locked down due to certification and safety considerations, whereas IGT operators can and do modify the engine control laws as necessary to optimize performance and efficiency for their individual installations.

Mr. Ernest Tong (GE) has been leading the TWG. A 2020 Wassenaar proposal to release limited IGT technology was submitted, but not accepted at the interagency level. The TWG will continue to work with BIS and DoD to address questions and concerns.

Commercial Supersonic Engines TWG

The renewed interest in civil supersonic aircraft for transport and business jet suggests a revisit of 9A001.b is necessary. The goal would be to release some engines from 9A001.b and replace the overly broad 9E001 control for those engines with a targeted 9E003 entry.

The Working Group was formed last year and a Wassenaar 2020 proposal has been drafted. It was not accepted at the interagency level. The TWG intends to draft a white paper for submission to the WA, and to continue to work actively with BIS and DoD to address questions and concerns.

Objectives/New Teams

- Continue to review Categories 7, 8, and 9 for possible updates.
- Leverage the TAC as a clearinghouse for ECR, as we have Commerce, DoD, and State in the room with Industry.
- Eliminate overlap and clarify control thresholds with 9.D.1, 9.D.2, and 9.D.4.
- Work UAS topics
- Review existing controls/need for new controls on commercial satellites
- Pursue opportunities to decontrol aspects of Industrial Gas Turbine (IGT) technology.
- Emerging commercial supersonic engines

Other Topics

There were no other topics discussed

Proposals/Comments from the public

There were no comments from the public.

The Open Session adjourned at 10:02 a.m.

Open Session Attendees

March 11, 2020 TransTAC

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