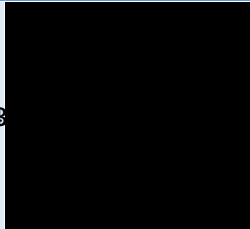
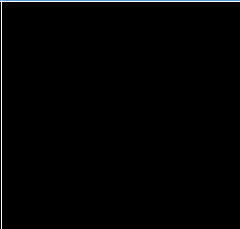
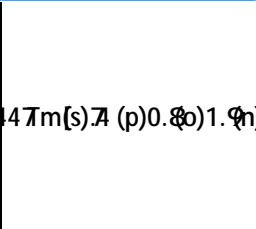
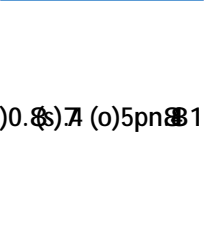
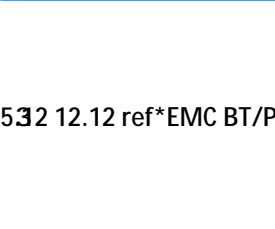
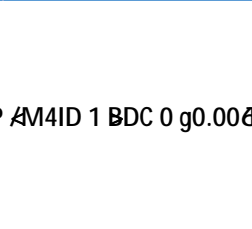


**NSTC Pre-award and Post-award Disclosures
Relating to the Biographical Sketch and Current and Pending (Other)**

NSF Pre-award and Post-award Disclosures
 Relating to the Biographical Sketch and Current and Pending (Other) Support
 January 2024

Type of Activity	Biographical Sketch	Current & Pending (Other) Support	Facilities, Equipment & Other Resources	Project Reports	Post-Award Information Term & Condition	Disclosure Not Required
Current or pending participation in, or applications to, programs sponsored by foreign governments, instrumentalities, or agencies of foreign governments.						

NSF Pre-award and Post-award Disclosures
 Relating to the Biographical Sketch and Current and Pending (Other) Support
 January 2024

Type of Activity	Biographical Sketch	Current & Pending (Other) Support	Facilities, Equipment & Other Resources	Project Reports	Post-Award Information

**NSF Pre-award and Post-award Disclosures
Relating to the Biographical Sketch and Current and Pending (Other) Support**

**NSF Pre-award and Post-award Disclosures
Relating to the Biographical Sketch and Current and Pending (Other) Support
January 2024**

Type of Activity	Biographical Sketch	Current & Pending (Other) Support	Facilities, Equipment & Other Resources	Project Reports	Post-Award Information Term & Condition	Disclosure Not Required
-------------------------	----------------------------	--	--	------------------------	--	------------------------------------