Impressed sources and fields in the volume-integral-equation formulation of electromagnetic scattering by a finite object: a tutorial

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Highlights.

- We analyze frequency-domain electromagnetic scattering by an arbitrary finite object.
- The presence of arbitrarily distributed impressed source currents is explicitly accounted for.
- The volume integral equation formulation of electromagnetic scattering is used, coupled with the notion of the transition operator and its fundamental symmetry property.
- The resulting theoretical formalism is general and self-contained.