CZEG Edmonton

EDMONTON CZEG

Centre Reference Guide 4.0

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Contents

Welcome to Edmonton Centre

The Edmonton FIR is the largest flight information region in Canada. Edmonton Centre is home to the busy terminal airspace surrounding Calgary and Edmonton and the world's most complex and active procedural airspace. Besides traffic to/from Calgary and Edmonton, there is lots of overflight traffic from nearby airports (Vancouver, Anchorage, Seattle, Salt Lake, Reykjavik, Montreal and Winnipeg) as well as from the US West Coast to Europe and from the US East coast to Asia and Alaska. This results in traffic flowing in several directions.

Edmonton Centre's responsibility is to coordinate and separate this enroute traffic, to sequence and space traffic arriving at airports within the FIR and in adjacent FIRs/ARTCCs, and handle arrivals and departures from uncontrolled airports within the FIR. Additionally, Edmonton Centre can (traffic permitting) assume the role of any unmanned positions within the FIR.

The result of all these jobs is a position that requires all the knowledge accumulated to this point and then some, as well as the ability to multi-task and keep track of multiple situations simultaneously. Edmonton Centre is a very demanding yet rewarding position. Remember that 4 to 5 hours of flying time is required for an aircraft to transit from east to west or vice versa.

Information in this document is compiled from various sources, including, but not limited to, NAV Canada publications, VATCAN's computer-based training modules and notes from past and present virtual controllers.

This document will be used with reference PDFs for Clearance, Ground, Tower, Departure and Arrival.

IFR Centre Phraseology

The VATSIM Code of Conduct requires that pilots not leave the network connection longer than 30 minutes. Centre controllers exercise judgment about when to involve a supervisor if an aircraft remains unresponsive to contactme requests beyond that time.

If you choose to involve a supervisor in the command line,

Type dot.wallop [callsign] [brief issue description]

Example:

.wallop AAL123 No response for 50 minutes to several contactme requests.

You will be contacted by private text message if a supervisor is online.

Initial contact (no handoff)

[Callsign], [controller callsign], squawk [code].

ATC: "JAZZ 7779, Edmonton Centre, squawk 4621."

ATC: "JAZZ 7779, identified."

Initial contact (handoff)

For aircraft arriving at Edmonton FIR airports:

[Callsign], [controller callsign], current information in [airport] is [ATIS], expect runway [runway].

ATC: "JAZZ 7779, Edmonton Centre, current information in Edmonton is India, expect runway 30."

For aircraft transiting our airspace to another FIR/ARTCC:

[Callsign], [controller callsign], [greeting].

"JAZZ 7779, Edmonton Centre, hello."

Traffic point out

[Callsign], traffic [clock position], [distance], [direction], [aircraft type], [altitude].

ATC: "WestJet 345, traffic 12 o'clock, 20 miles, opposite direction, B777 a thousand below."

Canadian Airspace

Canadian Airspace Review

Class A: VFR traffic is prohibited. IFR traffic only. ATC provides separation to all aircraft. All airspace from 18,000' to FL600 is Class A in the SCA (Southern Control Area).

Class B: All airspace from 12,500 to but not including 18,000'. VFR traffic is permitted only with an air traffic control clearance (also known as Controlled VFR or CVFR). VFR is treated precisely like IFR, except they must always remain VMC. ATC provides separation to all aircraft.

Class C: VFR traffic is permitted but must obtain clearance to enter. Separation is provided for IFR/IFR and IFR/VFR traffic. VFR/VFR separation is provided as workload permits. Edmonton and Calgary terminal control areas and control zones at CYYC, CYEG, CYBW, and CYMM are designated Class C.

Class D: VFR traffic is permitted but must establish 2-way radio communication to enter. In the Edmonton FIR, all remaining controlled (towered) airports not Class C are designated Class D. These include CZVL, CYXY, CYZF, CYQF and CYOD.

Class E: No control of VFR traffic is provided, only separation of IFR traffic. (Services can be provided to VFR on request.) Only areas around airports with control zones and along Victor airways or T RNAV airways are designated Class E. Outside of these areas is Class G airspace.

Class F: Advisory or restricted airspace that is not simulated on VATSIM.

Class G: Uncontrolled airspace. No control service is needed or provided by ATC. Both VFR and IFR aircraft proceed at their discretion.

The airspace above FL600 is Class E.

Airspace boundaries are clearly illustrated on the Canadian Interactive Airspace website: https://airspace.canadarasp.com.

Controlled and Uncontrolled Airspace

A clearance or instruction is only valid in controlled airspace. However, advisories such as traffic pointouts, altimeter settings and METARs can be provided to aircraft in uncontrolled airspace.

The phrase “while in controlled airspace” is used with the altitude if an aircraft enters or leaves controlled airspace. In addition, ATC specifies the lateral point and altitude at which an aircraft is to leave or enter controlled airspace if the instruction is required for separation purposes.

The altitude assigned by ATC need only reflect the minimum safe IFR altitude within controlled airspace. This is rarely an issue on VATSIM.

In CZEG, the common transitions from controlled to uncontrolled airspace that require specific phraseology take place:

- In the Southern Control Area between Class G and Class A airspaces at FL180
- In the Northern Control Area at FL230
- In the Arctic Control Area at FL270
- In the CZWG sectors for which CZEG is responsible at FL290

Entering Controlled Airspace

[Callsign], maintain [altitude] while in controlled airspace.

“Air Canada 789, maintain FL350 while in controlled airspace.”

If separation must be maintained with another aircraft:

[Callsign], enter controlled airspace at [altitude].

ATC: “Air Canada 789, enter controlled airspace at FL350.”

Leaving Low-level Controlled Airspace into Class G airspace

[Callsign], cleared to descend out of controlled airspace in the vicinity of [location]. The minimum IFR altitude is [altitude].

ATC: “WestJet 1875, cleared to descend out of controlled airspace in the vicinity of Edson. The minimum IFR altitude is 8,300 feet.”

Leaving High-level Controlled Airspace into an Uncontrolled Airport

[Callsign], cleared out of [type of airspace].

ATC: “WestJet 345, cleared out of controlled airspace.”

Leaving Controlled Airspace to Arrive at an Underlying Controlled Airport

[Callsign], cleared out of controlled airspace via [name, type] approach.

ATC: “WestJet 345, cleared out of controlled airspace via the Whitehorse ILS runway 32L approach, TEXOT transition.”

Class E Airport IFR Departures and Arrivals

Aircraft at a Class E airport wishing to depart IFR must contact ATC for an IFR clearance on the ground by voice or text.

Class E IFR Clearance Before Departure

[Callsign], [controller callsign], what runway are you planning? When will you be ready?

ATC: "Encore 2011, Edmonton Centre, what runway are you planning, and when will you be ready?"

[Callsign], you are cleared to [destination], [SID], flight planned route, depart runway [runway], squawk [code].

ATC: “Encore 2011, you are cleared to the Edmonton airport, Grande Prairie 1 departure, flight planned route, depart runway 25, squawk 3642.”

OR

[Callsign], you are cleared to [destination], flight planned route, depart runway [runway], climb on course/fly heading [heading], maintain [feet/flight level], squawk [code].

ATC: “Arctic 1491, you are cleared to the Edmonton airport via the Norman Wells airport, flight planned route, depart runway 28, climb on course, maintain FL330, squawk 3126.”

[Callsign], readback correct. [Conditions] Monitor Unicom 122.8 for your departure. Contact me airborne.”

ATC: “Encore 2011, readback correct. Clearance is valid now; clearance cancelled if not airborne by 2040z. Monitor Unicom 122.8 for local advisories. Contact me airborne.” (Identify aircraft when airborne.)

IFR clearance after VFR departure (“popup”)

[Callsign], [controller callsign], squawk [code].

"Encore 2011, Edmonton Centre, squawk 2432 and ident.

[Callsign], cleared to [destination] via present position direct [fix], flight planned route, climb [altitude].

“Encore 2011 cleared to the Edmonton airport via present position direct MESBO then flight planned route, climb FL250."

[Callsign], readback correct. Identified.

“Encore 2011, readback correct. Identified.”

Class E Arrival Clearance for an RNAV Approach

Pilots must specify the planned approach, which a specific or non-specific approach clearance can follow. Visual approaches must be requested.

[Callsign], what approach are you planning at [airport].

"Arctic 761, what approach are you planning at Norman Wells?”

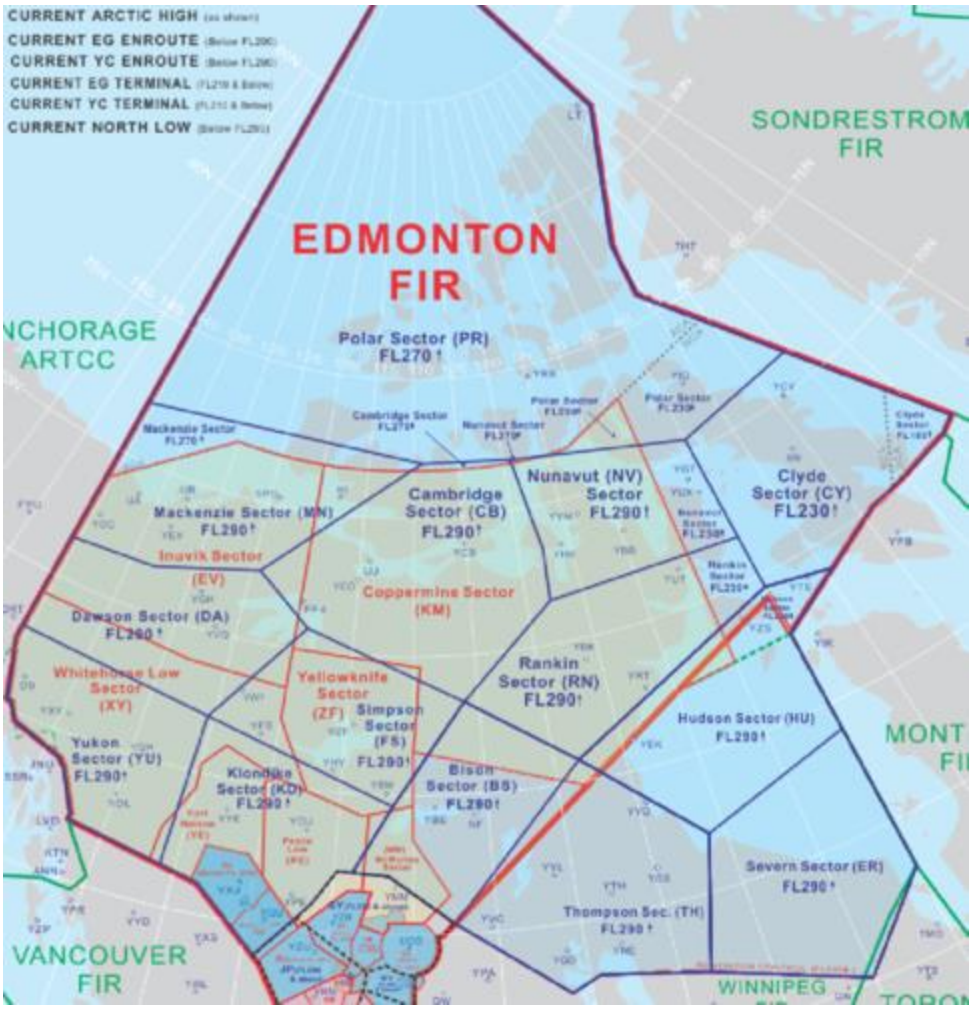
[Callsign], roger, plan the [approach] [runway].

“Arctic 761, roger, plan the RNAV runway 28.”

[Callsign], you are cleared out of controlled airspace via the [airport] [approach] runway [runway] approach. Monitor 122.8 and call me down and clear to close your flight plan.

“Arctic 761, you are cleared out of controlled airspace for the Norman Wells RNAV runway 28 approach, TOVIP transition. Monitor 122.8 and call me down and clear to close your flight plan.”

Edmonton FIR Airspace Boundary

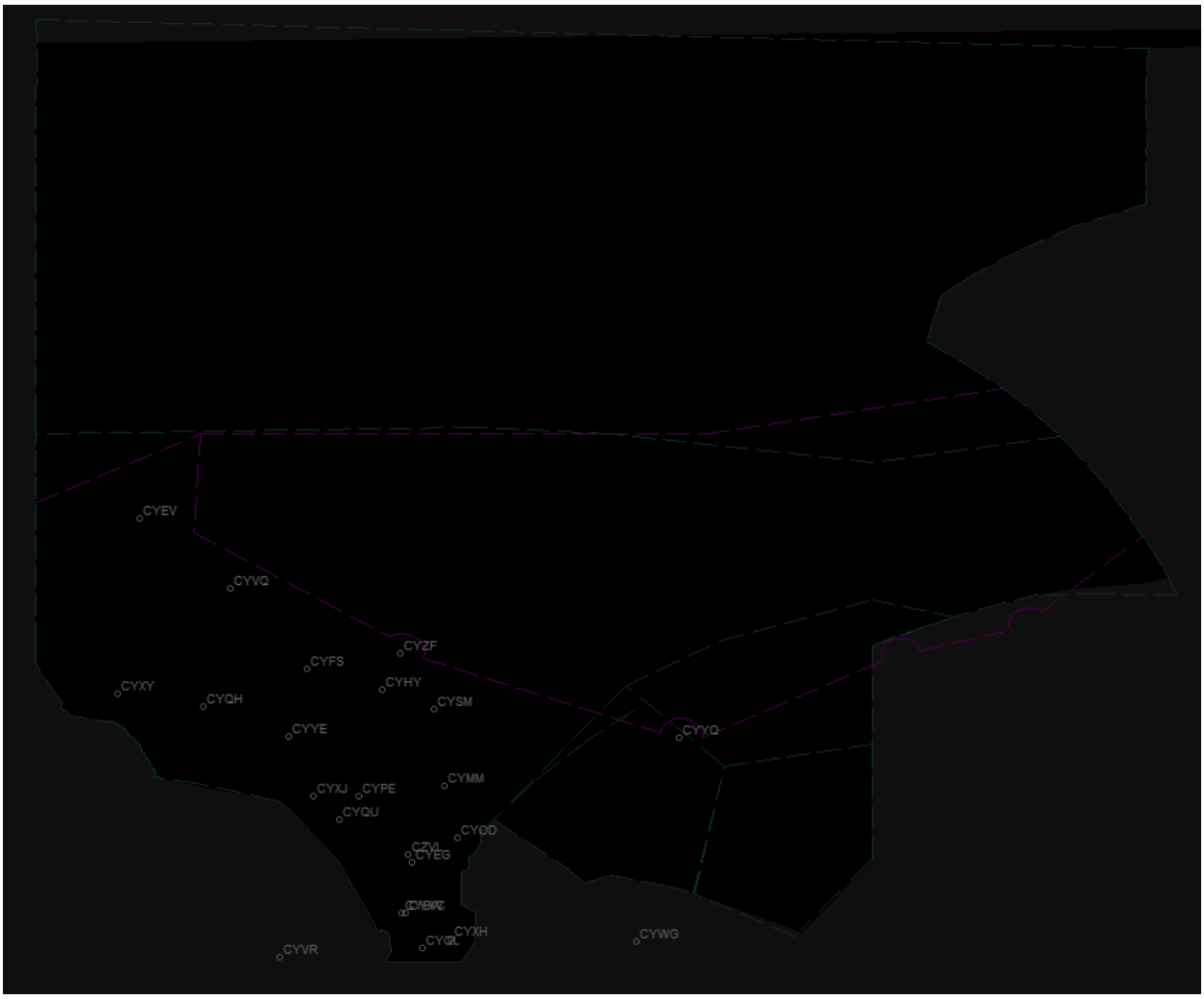


The Edmonton Flight Information Region is the world's largest air traffic control area. It comprises the Southern Control Area (SCA) – surface to FL600+, Northern Control Area (NCA) – FL230 – FL600+, and the Arctic – FL600+. The Edmonton FIR is also responsible for High-Level sector control of Hudson, Thompson, and Severn sectors in Winnipeg Airspace from FL290-FL600+.

CZEG Controller Positions

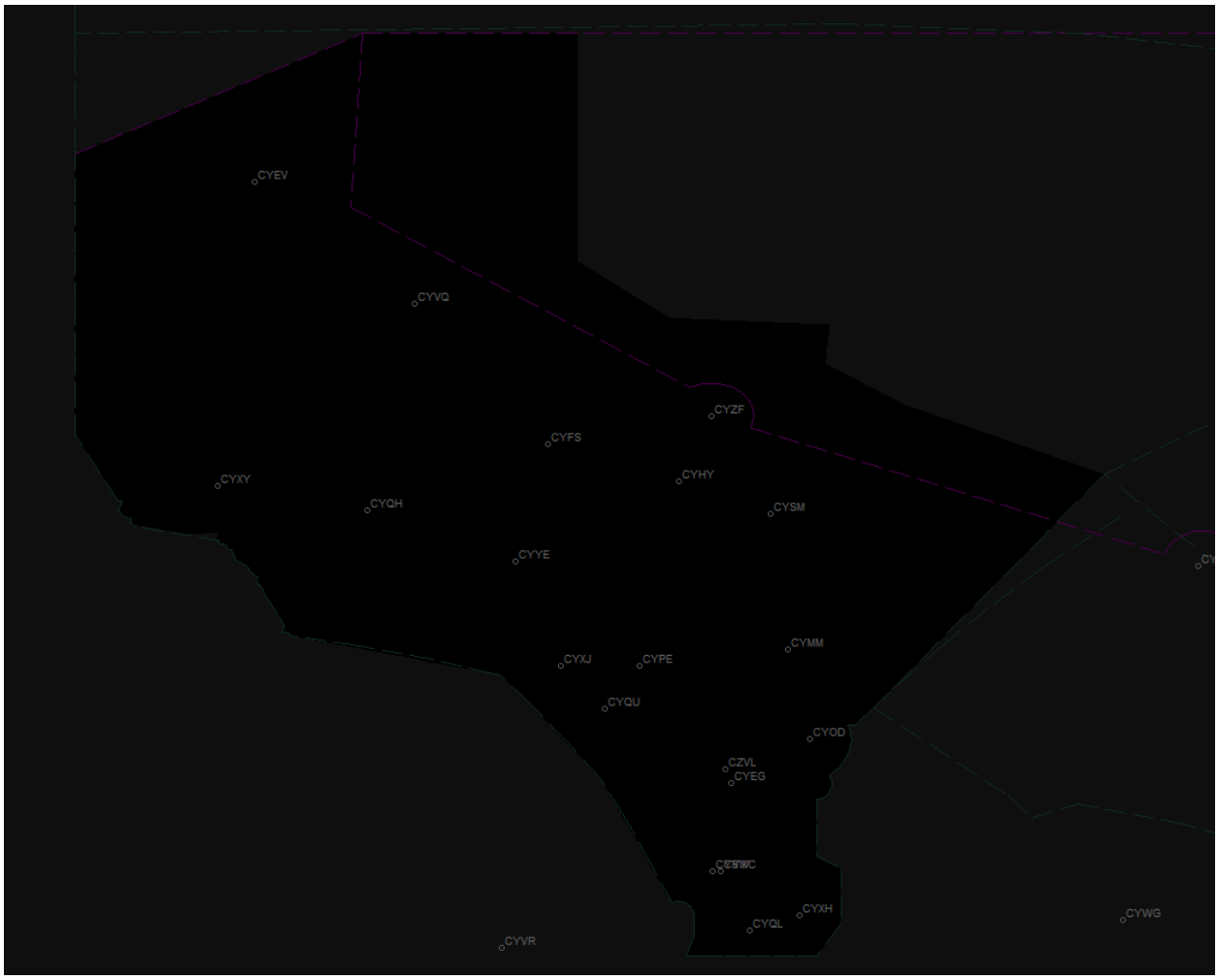
CZEG_FSS

This is the primary Edmonton Centre controller position. It controls all CZEG high and low sectors in the SCA, NCA and Arctic. The position is staffed by C1 controllers who have received a CZEG FSS endorsement. The use of the FSS designation for a Centre application is by special arrangement with VATSIM.



CZEG_CTR

Edmonton Centre controls all high-level and low-level sectors in the Southern Control Area (SCA) – Surface to FL600+. This included all unstaffed positions at Class C and D airports and Terminal Control Areas in the SCA. It is a student training position, only used by S3s on a solo certification or when training C1s to control in the Edmonton FIR. Its use is only with the authorization of the FIR Chief or their designated alternate.



Other Centre Logins

CZEG_1_FSS, CZEG_2_FSS, CZEG_3_FSS, CZEG_4_FSS – These positions duplicate CZEG_FSS, but Euroscope functionality is limited concerning sector ownership display and handoffs. They are to be used as authorized by the CZEG FIR Chief or his designated alternate, usually for events.

CZEG_H_CTR and CZEG_L_CTR – These positions are intended to be used together when two controllers split the CZEG_CTR position into low and high sectors. Neither is used if CZEG_CTR is online. These positions are for special use and training only by authorization of the FIR Chief or the Chief Instructor.

CZEG A_CTR, CZEG_N_CTR, CZEG_E_CTR and CZEG_P_CTR positions are for special use and training only by authorization of the FIR Chief or the Chief Instructor.

Euroscope Quick Reference

EUROSCOPE CHEAT SHEET

	Parameters	Action
F2	+ 4 letter ICAO Code(s)	Add/Remove METARs
F3	+ Click Aircraft Tag	Track Aircraft/Accept Handoff
F4	+ Click Aircraft Tag	Drop Aircraft/Reject Handoff/Initiate Handoff
F5	+ Altitude (hundreds) + Click Aircraft Tag	Change Final Altitude (Flightplanned altitude)
F6		Show Flight Strip for current aircraft
F7		Cycle through open Radar Views
F8	+ Altitude (hundreds) + Click Aircraft Tag	Change Temporary Assigned Altitude
F9	+ Click Aircraft Tag	Automatically Assign a squawk code
	+ 4 digit code + Click Aircraft Tag	Manually assign specified squawk code
	+ V/R/T + Click Aircraft Tag	Set the communication type (voice/receive only/text)
F11		Zoom In Radar
F12		Zoom Out Radar

	Command	Parameters	Action
F1 + a	.am	+ Click Aircraft Tag	Amend flight plan
F1 + c	.chat	+ Click Aircraft Tag	Open chat window
F1 + d	.distance	+ Click Aircraft Tag + Click Aircraft Tag/Point	Displays continually updated distance between aircraft and aircraft/point
F1+f	.find	+ type any Aircraft/Fix	Display line from centre of screen to that point
F1+p	.point	+ Controller ID Tag + Click Aircraft Tag	Highlights the specified aircraft on the specified controller's screen (*"Point Out"*)
F1+s	.sep	+ Click Aircraft Tag + Click Aircraft Tag	Displays continually updated prediction of closest point between aircraft
F1+0			Close current ASR view
F1+1 -> F1+9			Opens the pre-defined ASR views (defined in General Settings, pg 2)

Command	Parameters	Action
.break		Changes colour of your callsign (as seen by other controllers) to indicate you need a break/relief.
.center	+ Specify fix/aircraft	Centre the current radar view on the specified fix/aircraft
.contactme		Sends a text message to a pilot to "Contact me on frequency ###.###". Shortcut Key: HOME
.nobreak		Cancel the previous .break command
.qs	+ Contents of scratchpad	Change the aircraft scratchpad. Shortcut Key: INS
.rings	+ centre + spacing + number	Displays range rings about the centre point, the spacing (in miles) and number of rings are specified. .rings with no parameters clears the rings
.showvis		Shows the range of airspace where VATSIM aircraft information is visible
.vis	+ up to 4 fixes	Sets the centres of the VATSIM visibility range
.vis1, .vis2, .vis3, .vis4	+ fix	Specify individual centres of VATSIM visibility ranges
.wallop	message	Send a message to all online SUPervisors

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Contributions

Past and present members have contributed to this document's research, writing and maintenance. They include Gustavo Aguilar, Owen Kane, Josh Agins, Phil Dowling, Cody Newman, Tony Koch, Kris McCamis, and Thomas Smith.

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