A frequent noise abatement question asked at Naples Municipal Airport (APF) relates to why the airport’s Air Traffic Control (ATC) tower controllers routinely issue aircraft departing under Instrument Flight Rules (IFR) an initial climb clearance to 2,000’ (above mean sea level, MSL) with an instruction to “expect further clearance to X altitude” at takeoff + 10 minutes where X is typically a much higher altitude (e.g. 10,000 or 33,000 MSL), as requested in the flight plan filed for the departure.¹

The primary reason for this type of clearance is to provide initial vertical IFR separation from other air traffic at 3,000 MSL being managed by the local departure control facility² until the aircraft can safely climb to a higher altitude. Due largely to the proximity of APF to Southwest Florida International Airport (RSW) there are many potential conflicts at 3,000 MSL that departure controllers must resolve before approving a higher altitude; such as: aircraft on the right-hand downwind approach leg for landing on Runway 6 at RSW (that leg is between APF and RSW), arrivals from the Key West area, aircraft arriving and transitioning from the north, and traffic into and out of Marco Island Airport, and other factors.

After clearing aircraft for takeoff, Tower controllers at any given airport routinely instruct aircrews to contact the departure controller on a previously designated frequency. Typically, after being told to change frequencies by the tower controller, the aircrew’s communication with departure control results in a revised clearance to climb to a higher altitude within the departure controller’s airspace based upon traffic and other local issues.

The time required for the aircrew to initially establish communication with the departure controller can vary due to a number of factors. Other air traffic is one factor; high activity may delay the controller’s response. In addition, the period immediately after a takeoff is busy in a cockpit, while the aircrew is retracting the landing gear and adjusting flap, power, and other settings to transition between initial takeoff and climb configurations. The aircrew may briefly defer initiating contact with the departure controller until these changes are safely completed. Even after communication is established, the distance from the surveillance radar at RSW to APF may delay the issuance of a further climb clearance, since the departure controller must “see” the aircraft on the radar prior to taking that step.³

Whatever the cause, any delays in obtaining an amended clearance allowing the aircraft to continue or resume climbing are significant from a noise perspective, since the aircraft cannot exceed the previously assigned clearance – 2,000 MSL at APF – until a higher altitude can be safely assigned.

Despite these constraints, the time before an aircrew contacts departure control and receives further climb clearance can be very brief. At APF this contact often is made before the aircraft reaches the runway end, at an altitude of around 500 MSL; at other times controller and pilot workload may delay it somewhat, until the aircraft is perhaps two to three miles from the airport. More often than not, the climb restriction is lifted prior to reaching the initial assigned altitude (2,000 MSL), except in cases of conflicting traffic, unusually fast climbing aircraft, or the very rare occurrence of lost communications.

¹ The takeoff + 10 minutes aspect of this typical instruction relates to safely accommodating lost radio communications. A full discussion of that extremely rare occurrence is not relevant to this topic.
² The departure control facility serving APF is the FAA’s Terminal Radar Control Facility (TRACON) at Southwest Florida International Airport.
³ At any airport, site-specific factors influence climb restrictions, such as the complexity and uses of the overlying airspace, and the departure control facility’s area of jurisdiction; this discussion focuses on primary issues of relevance at APF.